Village of Arlington Heights

A REPORT TO WATER CUSTOMERS

2015
WATER QUALITY REPORT

DEPARTMENT OF PUBLIC WORKS

VILLAGE OF ARLINGTON HEIGHTS
WATER STAFF

JUNE 2016

INTRODUCTION

The 1996 Safe Drinking Water Act passed by Congress mandates that every public water supply in the United States prepare and distribute an annual report on water quality. This annual report to water consumers in Arlington Heights characterizes the quality of our drinking water. The format of this report is regulated by the United States Environmental Protection Agency (USEPA). USEPA requires certain mandatory language and data in this report. These informational items must be published every year in the Village's Water Quality Report.

This year, as in past years, drinking water in Arlington Heights met all Federal and State standards. The Arlington Heights Water Utility constantly monitors and safeguards the water supply. The Arlington Heights water system did not exceed any State or Federal contaminant levels nor any other water quality standard during 2015. The Village is committed to providing its customers with safe drinking water and we are pleased to share this water quality report with you.

Questions regarding water quality or other water related issues should be directed to:

Jeff Musinski, Superintendent of Utilities
Village of Arlington Heights
222 N. Ridge Avenue
Arlington Heights, Illinois 60005
Phone (847) 368-5800 Fax (847) 577-5930

In keeping with our continuing efforts to be environmentally responsible, the Village will offer this report next year on the Village web site (www.vah.com). Your water bill will inform you of the availability of the report. A printed copy will be available upon request (847-368-5800).

Periodically, water related topics are addressed by the Village Board of Trustees. The Village Board meets on the first and third Monday of each month at 8:00 p.m. at the Municipal Building, 33 S. Arlington Heights Rd., Arlington Heights, IL 60005.

A BRIEF COMMENT CONCERNING WATER INFRASTRUCTURE MAINTENANCE AND REPLACEMENT

The replacement of water related infrastructure is constantly being performed within the Village of Arlington Heights. This includes both above and underground infrastructure.

The Village of Arlington Heights has ten water storage tanks that require painting every twenty five to thirty years. The maintenance of water pumping stations is an ongoing task that requires proper planning and coordination to ensure the uninterrupted flow of potable water to our customers. Maintenance of the Village's emergency wells is an ongoing task as well.

The Village of Arlington Heights has over two hundred and sixty miles of water main. Seventy miles of water main are over sixty years old. The failure of water main includes many factors such as poor soil conditions, stray electrical current, depth of bury and poor pipe quality. The prioritization of replacement is based upon many factors which include critical customers, rate of failure, scheduled road replacement and ease of construction.

Arlington Heights Public Works continues to maintain existing infrastructure on an annual basis as part of our ongoing Capital Program. As such, the planned water main replacement this year will entail the replacement of the 6" water main with an 8" water main on Pine Tree from Palatine to Valley Lane. The 6" water main on Valley Lane from Pine Tree to Arlington Heights Road will be replaced with an 8" water main and the 6" water main on Circle Hill will be replaced with an 8" water main. The 10" water main located on Francis between Patton and Princeton will be replaced as part of the ongoing road resurface program.

The west six million gallon water tank located at White Oak and Wilke will undergo recoating inside the tank and extensive maintenance outside the tank. The last emergency well to be refurbished is located on Hintz and is undergoing complete rehabilitation. This assures the Village of an adequate emergency supply of potable water in the event of service interruption from Northwest Water Commission. Work continues towards replacement of existing emergency generators at the water booster stations to guarantee reliability of service in the event of power failure.

WATER MONITORING, TESTING AND ANALYSIS

This year, as in past years, the Village of Arlington Heights and the Illinois Environmental Protection Agency (IEPA) have initiated and implemented significant measures which safeguard your drinking water. Drinking water in Arlington Heights is monitored and tested in accordance with United States Environmental Protection Agency standards and regulations. Each year the Village and IEPA perform over 1200 analytical tests in order to assure water quality. These analytical tests are an integral part of a monitoring program that detects and quantifies over 120 contaminants and microbials.

A BRIEF DISCUSSION ABOUT WATER SYSTEM SECURITY AND VULNERABILITY

The official title of this document is "Consumer Confidence Report". One essential element which contributes to the confidence level of our water customers is water system security. Our customers demand and expect that their drinking water is safe and plentiful. Water system security and protection is the cornerstone of any municipal water supply.

It is not appropriate to disseminate the specific mitigation measures developed for the Arlington Heights water system in this publication. However, appropriate plans and measures have been developed and are constantly refined as time and technology allow. The Village President and Board of Trustees, the Village Manager and the Water Utility Operations staff are unalterably committed to preventing attack and intrusion and to developing emergency measures to counter any event or act which threatens the delivery of plentiful, reliable, and safe drinking water to customers in the Village of Arlington Heights.

WATER SOURCE AND DELIVERY SYSTEM

It should be noted that the source water for customers in Arlington Heights is Lake Michigan. Beginning in 1985, the Village Water Utility changed from deep well ground water to Lake Michigan surface water. Although the Village maintains 6 deep wells for emergency purposes, the sole water source for Arlington Heights is Lake Michigan water treated by the City of Evanston.

Continued on page 3

INTERESTING STATISTICS

Miles of public water main (4"-30") 230+.
Number of metered customers, 20,788.
Average day water pumpage, 7.6 million gallons.
Number of public fire hydrants, 3315+.
Number of water storage reservoirs; 10.
Pumping capacity; 31,050 gallons/minute.

WATER TREATMENT

The City of Evanston is responsible for all required treatment of our drinking water. The Evanston water filtration plant provides the following treatment processes: Flocculation, Sedimentation, Rapid Sand Filtration, and Disinfection. The Evanston plant adds fluoride and chlorine to the water in accordance with State and Federal guidelines. Additionally, the Evanston plant adds Polyorthophosphate as a corrosion inhibitor to guard against lead and copper contamination of the drinking water supply.The Village monitors the levels of chlorine disinfectant in the treated, finished water and adds chlorine as needed in order to maintain a disinfectant residual as required by State and Federal Regulations. Northwest Water Commission collects water from the Evanston plant and distributes the water to Arlington Heights.

SOURCE WATER ASSESSMENT AND PROTECTION

In accordance with the 1996 Amendments to the Federal Safe Drinking Water Act, the Illinois Environmental Protection Agency (IEPA) has performed and completed a "Source Water Assessment" for the Village of Arlington Heights water supply. The "source water" for Arlington Heights is Lake Michigan at Evanston, Illinois. The City of Evanston provides complete water treatment and filtration of all water supplied to Village of Arlington Heights municipal water customers.

Continued on page 7

The following table provides information regarding finished water quality obtained by the City of Evanston during periodic sampling at their water treatment facility.

Evanston 2015 Water Quality Data

Regulated Contaminants

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 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 known or expected risk to health. MRDLG's allow for a margin of safety.

Regulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contaminant
Inorganic Contaminants								
Barium	2015	0.02	0.02 – 0.02	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries: Erosion of natural deposits.
Chromium	2015	1	0.9 – 0.9	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2015	1.1	1 – 1.2	4	4.0	ppm	N	Erosion of natural deposits. Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2015	0.3	0.3 – 0.3	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium	2015	8	7.5 – 7.5	–	–	ppm	N	Erosion from naturally occuring deposits; Used in water softner regeneration.
Radioactive Contaminants								
Combined Radium 226/228	01/16/2014	0.99	0.99 – 0.99	0	5	pCi/L	N	Erosion of natural deposits.
Gross Alpha excluding radon and uranium	01/16/2014	0.16	0.16 – 0.16	0	15	pCi/L	N	Erosion of natural deposits.

*MCL Statement: The maximum contaminant level(MCL) for TTHM and HAA5 is 80 ppb and 60 ppb respectively and is currently only applicable to surface water supplies that serve 10,000 or more people. These MCLs became effective 01/01/2004 for all groundwater supplies and surface supplies serving less then 10,000 people. Until 01/01/2004, surface water supplies serving less then 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.

Note: The state requires monitoring of certain contaminants less than once per year because the contaminants do not change frequently. Therefore, some of this data may be more than one year old. MCL (Maximum Contaminant Level): 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. MCLG (Maximum Contaminant Level Goal): 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. AL (Action Level): The concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow.

ppm: parts per million ppb: parts per billion ppt: parts per trillion pCi/l: picoCuries per liter (measurement of radioactivity)

TURBIDITY				
Limit (Treatment Technique)	Lowest Monthly % meeting limit	Highest Single Measurement	Violation	Source
0.3 NTU	100%	N/A	No	Soil runoff
1 NTU	N/A	0.19 NTU	No	Soil runoff

Information Statement: Turbidity is a measurement of the cloudliness 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. Results may be obtained by calling the contact listed on the first page of this report.

TOTAL ORGANIC CARBON

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

EDUCATIONAL STATEMENTS

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 USEPA 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, people 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 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 may 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 also may come from gasoline stations, urban storm water runoff and septic systems.
- **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. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide similar protection for public health.

VIOLATION REPORT SUMMARY

The Village of Arlington Heights water utility is proud to report that no violations of any state or federal standard occurred during the 2015 reporting period.

EMERGENCY WATER SUPPLY DEEP WELL'S

The Village owns and operates several deep wells as a source of emergency water supply. Water Quality Data is available upon request. No well water was distributed in 2015.

Cryptosporidium Monitoring –

The Village of Arlington Heights does not monitor for cryptosporidium. However, in accordance with the "Long Term Enhanced Surface Water Treatment Rule" established by USEPA, Evanston is currently monitoring for cryptosporidum monthly. Monthly testing for cryptosporidium began in April 2007. Monitoring performed by Evanston in 2010 did not detect cryptosporidium, giardia, or escherichia coli in the "raw" source water withdrawn from Lake Michigan.

UCMR Contaminant Analysis

The Village of Arlington Heights is performing this analysis. Their results can be referenced on page 6. EPA uses the Unregulated Contaminant Monitoring (UCM) program to collect data for contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe Drinking Water Act (SDWA). Every five years EPA reviews the list of contaminants, largely based on the Contaminant Candidate List. The SDWA Amendments of 1996 provide for:

- Monitoring no more than 30 contaminants every five years
- Monitoring only a representative sample of public water systems serving less than 10,000 people
- Storing analytical results in a National Contaminant Occurrence Database (NCOD)

The UCM program progressed in several stages. Currently, EPA manages the program directly as specified in the Unregulated Contaminant Monitoring Rule (UCMR). The third Unregulated Contaminant Monitoring Rule (UCMR 3) was signed by EPA Administrator, Lisa P. Jackson on April 16, 2012. The UCMR 3 requires monitoring for 30 contaminants using EPA and/or consensus organization analytical methods during 2013-2015.

Monitoring Data Summary Tables

- In addition to the informational section of this water quality report the Village has included several tables for your review. These tables list and quantify contaminants that were detected in your drinking water or were tested for but not detected.
The following table and data is applicable to Arlington Heights drinking water:

continued on P. 5

Arlington Heights 2015 Water Quality Data

Regulated Contaminants

Lead and Copper

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 are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. 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 http://www.epa.gov/safewater/lead.

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 (ALG):** 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.

Coliform Bacteria						
MCLG	**Total Coliform MCL**	**Highest No. of Positive**	**Fecal Coliform or E. Coli MCL**	**Total No. of Positive E. Coli or Fecal Coliform Samples**	**Violation**	**Likely Source of Contamination**
0	5% of monthly samples are positive	1.2	–	0	N	Naturally present in the environment.

Lead & Copper								
	Date Sampled	**MCLG**	**Action Level (AL)**	**90th Percentile**	**# Sites Over AL**	**Units**	**Violation**	**Likely Source of contamination**
Copper	2014	1.3	1.3	<0.150	0	ppm	N	Erosion of natural deposits. Leaching from wood preservatives:
Lead	6/30/2014	0	15	2.9	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contaminant**
Disinfectants & Disinfection By-Products								
Chlorine	12/31/15	1	0.7 – 1	MRDLG=4	MRDL=4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2015	25	0 – 57	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
TTHMs (Total Trihalomethanes)	2015	38	23.1 – 53.8	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants								
Arsenic	2015	3	0 – 3	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2015	0.06	0.028 – 0.06	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2015	4.5	0 – 4.5	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2015	1.34	0.899 – 1.34	4	4.0	ppm	N	Erosion of natural deposits. Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	2015	0.86	0.28 – 0.86	–	1.0	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2015	19	9.6 – 19	150	150	ppb	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate (measured as Nitrogen)	2015	1	0 – 1.01	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2015	8.6	0 – 8.6	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium	2015	230	23 – 230	–	–	ppm	N	Erosion from naturally occurring deposits; used in water softener regeneration.
Zinc	2015	0.0079	0 – 0.0079	5	5	ppm	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal refineries.

continued on P. 6

continued from P. 5

UCMR Contaminant					
	Average	**Range**	**Unit**	**MCL**	**Likely Source of Contamination**
Total Chromium	.252	.217-.271	ppb	100	Discharge from steel & pulp mills; erosion of natural deposits
Hexavalent Chromium (chromium-6)	.186	.160-.202	ppb	–	Naturally occurring element; used in making steel or other alloys. Chromium-3 or -6 forms are used for chrome plating, dyes, pigments, leather tanning and wood preservation.
Molybdenum	1.062	1.023-1.084	ppb	–	Naturally occurring element found in ores and present in plants, animals and bacteria; commonly used form is molybdenum trioxide.
Strontium	121.563	112.757-129.511	ppb	–	Naturally occurring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions.
Vanadium	.262	.225-.288	ppb	–	Naturally occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst. Both forms would result from surface water runoff into the source water.
Chlorate	30.653	21.687-37.280	ppb	–	Chlorate is an anion that can enter drinking water from several potential sources, including from hypochlorite or chlorine dioxide disinfectant use, ozone oxidation of hypochlorite or chlorite and source water contamination from pesticide runoff or paper mill discharges.

* A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language been set. The purpose of unregulated contaminant monitoring is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water and whether further regulation is warranted.

Note: The state requires monitoring of certain contaminants less than once per year because the contaminants do not change frequently. Therefore, some of this data may be more than one year old. MCL (Maximum Contaminant level): 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. MCLG (Maximum Contaminant Level Goal): 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. AL (Action Level): The concentration of a contaminants which, if exceeded, triggers treatment or other requirements which a water system must follow.

Definitions: **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. **AL**: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. **TT**: Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

Definitions: **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. **AL**: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. **TT**: Treatment Technique or a required process intended to reduce the level of a contaminant in drinking water.

Abbreviations: **nd** – not detectable at testing limits. **n/a** – not applicable. **ppm** – parts per million or milligrams per liter. **ppb** – parts per billion or micrograms per liter. **ppt** – parts per trillion, or nanograms per liter. **ppq** – parts per quadrillion, or pictograms per liter. **n/a** – not applicable. **NTU** – Nephelometric Turbidity Unit, used to measure cloudiness in drinking water. **%<0.5 NTU** – Percent samples less than 0.5 NTU. **MFL** – Million fibers per liter, used to measure asbestos concentration. **mrem/yr** – millirems per year, used to measure radiation absorbed by the body. **pCi/l** – picocuries per liter, used to measure radioactivity. **#pos/mo** – number of positive samples per month. **%pos/mo** – percent positive samples per month. In most cases, the "**Level Found**" column represents an average of sample result data collected during the CCR calendar year. The "**Range of Detections**" column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year. If a date appears in the "**Date of Sample**" 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 CCR calendar year.

About the Data

LEAD Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the USEPA Safe Drinking Water Hotline (800-426-4791).

A Word About Taste and Odor Problems

Periodically, due to changes in the chemical properties of your drinking water, objectionable tastes and/or odors may be present. These "T & O" problems are typically attributable to either the chlorine used to disinfect the water or to algae in Lake Michigan.

Although counterintuitive, the chlorine smell is due to too little chlorine in the water rather than too much. The low chlorine residual is out of balance with the physical and chemical properties of the water resulting in a strong chlorine odor. This problem typically disappears in a day or two.

The second taste and odor problem is related to algae in Lake Michigan. Simply stated, when the algae comes in contact with the chlorine disinfectant an earthy, musty taste and odor is imparted to the water. Although harmless, the earthy, musty taste is highly objectionable to a majority of water customers. The City of Evanston has initiated enhanced water treatment techniques which have helped to mitigate the taste and odor problems when they occur.

Water Testing and Monitoring in Arlington Heights

Water quality and purity is of paramount importance in Arlington Heights. The Village Water Utility Operations staff is on constant vigil to monitor for and guard against microbial and chemical contamination of the drinking water. The following is a brief description of the testing parameters and frequency of testing used in Arlington Heights. (All tests are performed by a private, IEPA certified laboratory or by the IEPA Laboratory in Champaign, Illinois).

Microbial Testing – Samples are obtained from 20 sites in the Village on a weekly basis. These sites are located strategically throughout the Village and are representative of the entire water distribution network in Arlington Heights. The 20 weekly bacteriological samples are analyzed for chlorine residual value and for bacteriological contamination. Particular emphasis is placed on detecting Coliform bacteria.

Disinfectant Monitoring – The essence of a safe drinking water supply is disinfection. Initial disinfection of our drinking water is done as part of the water treatment process at the City of Evanston's water treatment plant. Disinfectant (chlorine) residual content is maintained by both the Northwest Water Commission and by the Village. The Village monitors chlorine residual by using continuous chlorine analyzers. These analyzers instantaneously determine if additional chlorine is needed in order to maintain safe, effective disinfectant levels.

Water Quality Monitoring – The Village samples and tests incoming water supplied by Evanston and the Northwest Water Commission. These tests are conducted on a bi-weekly basis. These samples are obtained from the four Northwest Water Commission water supply entry points to the Village. These samples are analyzed for pH, corrosion inhibitor and related water quality parameters.

Continued from P. 3

The IEPA 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 intakes with no protection, which is the reason for mandatory treatment for all surface water supplies in Illinois. All three of Evanston's intakes are located far enough offshore that shoreline impacts are not considered a factor on water quality. However, at certain times of the year the potential for contamination exists due to the proximity of the North Shore Channel. In addition, the proximity to a major shipping lane adds to the susceptibility of these three intakes. Water supply officials from Evanston are active members of the West Shore Water Producers Association. Coordination regarding water quality situations (i.e., spills, tanker leaks, exotic species, etc) is frequently discussed during the Associations quarterly meetings. Lake Michigan, as well as all the Great Lakes, has many different organizations and associations that are currently working to either maintain or improve water quality. Since the predominant land use within Illinois' boundary of Lake Michigan watershed is urban, a majority of watershed protection activities in this document are aimed at this purpose. The combination of land use, drainage basin attributes, and the proximity of sources of pollution all contribute to the susceptibility of the Lake Michigan source water at Evanston. However, it should be stressed that water treatment provided by Evanston is highly protective of their consumers. The history of finished water quality produced by the Evanston Water Treatment Facility is testimony to the thoroughness and effectiveness of the Evanston Water Treatment Program. All agencies involved in ensuring the delivery of safe drinking water to consumers in Arlington Heights have developed programs designed to address source water protection issues at the local level.

Specific source water assessment and protection information can be obtained from the IEPA at www.epa.state.il.us/water/groundwater/source-water and www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl

In order to ensure that tap water is safe to drink, the IEPA 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.

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.

BETA/PHOTON EMITTERS The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be a level of concern for beta particles.

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 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 regulated contaminants in drinking water, and whether future regulation is warranted.

A Note To All Retail, Commercial, Industrial, and Large Residential Water Customers

The Village of Arlington Heights administers a comprehensive backflow prevention program. This program is designed to protect the integrity of the water distribution system and insure safe potable water is delivered to all customers at all times. This program is required by the Illinois Environmental Protection Agency.

Every two years the Village of Arlington Heights collects competitive bids for the services of annual inspection and maintenance of all backflow devices within the Village of Arlington Heights. This year Skirmont Mechanical has been awarded the contract for these services. The contact for Skirmont Mechanical is Joyce Anderson at (847)888-9292. If you wish to have more information concerning the Backflow Prevention, please contact Mike Gilles, Meter Foreman with the Village of Arlington Heights at (847)368-5800.

A Word of Caution

The Village of Arlington Heights does not engage the services of outside vendors to monitor water quality. All water sampling is performed by Village Department of Public Works staff members. All Public Works staff members carry Village-issued identification cards. Please keep this in mind when dealing with individuals who want to discuss water quality issues with you.

This 2015 Water Quality Report documents the commitment made by the Village of Arlington Heights to provide you with a safe, reliable drinking water supply.

The Village President and Board of Trustees and the Village Water Utility Operations staff have an enviable history in developing, financing, and operating the public water supply in Arlington Heights.

This responsibility is taken very seriously and we pledge our continued vigilance in supplying you with safe drinking water.

Water Quality in Arlington Heights meets or exceeds all State and Federal drinking water standards.