WATER QUALITY REPORT FROM JANUARY 1, 2014 TO DECEMBER 31, 2014

Keeping Our Community Educated On the Quality of Our Drinking Water

The purpose of this report is to keep our Residents informed on the quality of their drinking water, and the monitoring requirements mandated by the Environmental Protection Agency (EPA). If you have any questions or concerns pertaining to this report, please call Jim Russo, Water Department Foreman, at (630) 620-2020.

The Village of Addison receives all of its water through the DuPage Water Commission (DWC), via the City of Chicago Jardine Water Filtration Plant. The Village of Addison has been supplying 100% Lake Michigan water since March of 1992.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Safe Drinking Water Hotline at (800) 426-4791. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with 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).

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 materials, 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 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.

Explanations of the abbreviations and definitions you will need to understand the sampling data on the water quality sheet for 2014 are as follows:

Maximum Contaminant Level Goal (MCLG) -The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Residual Disinfectant Level Goal (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 (MRDL) – The highest level of a drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contamination.

ppb	micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.
nd	not detectable at testing limits
n/a	not applicable
ppm	parts per million, or milligrams per liter – or one ounce in 7,350 gallons of water.
Avg	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
NTU	Nephelometric Turbidity Unit, used to measure cloudiness in drinking water
pCi/L	Picocuries per liter, used to measure radioactivity

Range of Detection- This column represents a range of individual sample results, from lowest to highest that were collected during the Consumer Confidence Report (CCR) calendar year.
Level Found- This column represents an average of sample data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

Haloacetic acids - (HAA5) are disinfectant by-products. The Village of Addison began monitoring for HAA5 in 2000. The City of Chicago started monitoring for HAA5 in July, 1998. All samples collected by the Village of Addison have been far below the levels set by the IEPA.

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 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. ALGs allow for a margin of safety.

Action Levels (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Trihalomethanes- are disinfectant by-products. The Village of Addison started sampling for Trihalomethanes in July 1987. The samples are collected quarterly.

Turbidity- is a measure of the cloudiness of the water. The City of Chicago monitors it because it is a good indicator of water quality and the effectiveness of their filtration system.

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 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 the level is greater than 20 mg/l and you are on a sodium-restricted diet, you should consult a physician.

Cryptosporidium- Analyses' have been conducted monthly on the source water since April 1993. Cryptosporidium has not been detected in these samples. Cryptosporidium is a single-celled parasite, highly resistant to chlorine, which produces an illness characterized by vomiting, fever, diarrhea and fatigue when ingested. Treatment processes have been optimized to ensure that if there are cryptosporidium cysts in the source water, they will be removed during the treatment process. By maintaining a low turbidity and thereby removing the particles from the water, the threat of cryptosporidium organisms getting into the drinking water system is greatly reduced.

Chromium- Occurs naturally in the environment as chromite iron ore. It is rarely found naturally in water, yet it is widely distributed in soils and plants. Chromium in this form is an important contributor to human health. Chromium can also exist in a toxic state as Hexavalent Chromium, which is associated with industrial waste. Chromium is used in metal alloys including stainless steel, protective coatings on metal, magnetic tapes and pigments for paints, cement, paper and rubber. The USEPA determined that there is no evidence that the lifetime exposure to Chromium in drinking water can cause cancer. Hexavalent Chromium at acute levels can cause skin irritation or ulcerations; long-term exposure to Hexavalent Chromium can lead to liver and kidney damage as well as damage to nerve tissue. Hexavalant chromium has been successfully eliminated from entering the environment as a result of past and current national pollution discharge elimination system and industrial pollution discharge limits. The MCL for Chromium in drinking water is 100ug/l.

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

SOURCE WATER ASSESSMENT:
We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. To view a summary version of the completed Source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl.

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.

VILLAGE OF ADDISON

No drinking water quality violations were recorded during 2014

UCMR3 COMPLIANCE REPORTING

In compliance with the Unregulated Contaminant Monitoring Rule 3(UCMR3) as required by the EPA, the Village of Addison has monitored for 28 contaminants suspected to be present in drinking water, but that do not have health-based standards set under the safe drinking Water Act. The monitoring results were reported to the EPA. The list of UCMR3 contaminants that we have monitored included volatile organic chemicals, metals, perfluorinated compounds, hormones,1,4-dioxane and chlorate. The contaminants that were detected in this monitoring program are listed below.

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. A maximum contaminant level (MCL) for these substances has not been established by either state or federal regulations, nor has mandatory health effects language.

DETECTED CONTAMINANTS

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Average Detected	Range of Detection
CHROMIUM (ppb) Naturally-occuring element; used in making steel and other alloys; used for chrome plating, dyes, and pigments, leather tanning, and wood preservation.	100	100	0.425	0.3-0.7
MOLYBDENUM (ppb) Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide used as a chemical reagent.	NA	NA	1.075	1-1.1
STRONTIUM (ppb) Naturally-occuring element; historically, commercial use of strontium has been in the faceplate glass of cathode-ray tube televisions to block x-ray emissions.	NA	NA	123.75	117.6-130.8
VANADIUM (ppb) Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst.	NA	NA	0.25	0.3-0.2
CHROMIUM-6 or Hexavalent chromium (ppb) Naturally-occurring element; used in making steel and other alloy; used for chrome plating, dyes, and pigments, leather tanning, and wood preservation.	NA	NA	0.19	0.19-0.2

Lead and Copper

	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# sites over AL	Units	Violation	Likely Source of Contamination
Copper	2014	1.3	1.3	0.17	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead	2014	0	15	1.5	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Sampled	Highest Level	Range of Detection	Units	MCLG	MCL	Violation	Likely Sources of Contaminants
Chlorine	12/31/2014	0.8	0.6 – 1.2	ppm	MRDLG=4	MRDL=4	No	Water additive used to control microbes
Haloacetic Acids (HAA5)	2014	15	8.3 – 13.6	ppb	No goal for the total	60	No	By-product of drinking water chlorination.
Total Trihalomethanes (TTHM)	2014	46	15.251 – 51.24	ppb	No goal for the total	80	No	By-product of drinking water disinfection

Below are sample results collected from the Village of Addison Emergency Backup Wells and not Chicago Water.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Detection	Units	MCLG	MCL	Violation	Likely Source of Contamination
Arsenic	10/29/2012	2	2 – 2	ppb	0	10	No	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronics production waste.

Barium	10/29/2012	0.037	0.037 – 0.037	ppm	2	2	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Iron	10/29/2012	3.8	3.8 – 3.8	ppm		1.0	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits
Manganese	10/29/2012	45	45 - 45	ppb	150	150	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits
Sodium	10/29/2012	53	53 - 53	ppm			No	Erosion from naturally occurring deposits, Used in water softener regeneration
Zinc	10/29/2012	0.024	0.024 – 0.024	ppm	5	5	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Detection	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	8/24/2011	2.35	1.163 – 2.35	0	5	pCi/L	No	Decay of natural and man-made deposits
Gross alpha excluding radon and uranium	8/24/2011	1.72	1.3 – 1.72	0	15	pCi/L	No	Decay of natural and man-made deposits

MCL Statement: The Maximum contaminant level (MCL) for TTHM and HAAs 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 than 10,000 people. Before 01/01/2004, surface water supplies serving less than 10,000 people, any size water supply that purchase from a surface water source, and groundwater supplies serving more than 10,000 people had to 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, may have increases risk of getting cancer.

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. 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 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: pico Curies per liter (measurement of radioactivity)

CITY OF CHICAGO 2014 TEST RESULTS

No drinking water quality violations were recorded during 2014

Detected Contaminants

Contaminant (unit of measurement) Typical Source of Contaminant	**MCLG**	**MCL**	**Highest Level Detected**	**RANGE OF DETECTION**	**COLLECTION DATE**
Turbidity Data					
TURBIDITY (NTU/Lowest Monthly %<0.3NTU) Soil runoff.	n/a	TT (Limit 95%<0.3NTU)	100%	100% - 100%	
TURBIDITY (NTU/Highest Single Measurement) Soil runoff.	n/a	TT (Limit 1 NTU max)	0.18 NTU	n/a	
Inorganic Contaminants					
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	2	2	0.0205	0.0204 – 0.0205	
NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	10	10	0.31	0.30 – 0.31	-
TOTAL NITRATE & NITRITE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	10	10	0.31	0.30 – 0.31	

Unregulated Contaminants					
SULFATE (ppm) Erosion of naturally occurring deposits.	n/a	n/a	35.5	20.9 – 35.5	
SODIUM (ppm) Erosion from naturally occurring deposits; Used in water softener.	n/a	n/a	10.0	9.53 – 10.0	
State Regulated Contaminants					
FLUORIDE (ppm) Water additive which promotes strong teeth	4	4	0.98	0.94 – 0.98	
Radioactive Contaminants					
Combined Radium 226/228 (pCi/L) Decay of natural and man-made deposits	0	5	0.84	0.50 – 0.84	
GROSS ALPHA excluding radon and uranium (pCi/L) Decay of natural and man-made deposits	0	15	6.6	6.1 – 6.6	

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DETECTED CONTAMINANTS

Contaminant (unit of measurement) Typical Source of Contaminant	MCLG	MCL	Highest Level Detected	Range of Detection
CHROMIUM (ppb) Naturally-occurring element; used in making steel and other alloys	100	100	0.3	0.2-0.3
MOLYBDENUM (ppb) Naturally-occurring element found in ores and present in plants, animals and bacteria; commonly used form molybdenum trioxide	NA	NA	1.1	1.0-1.1
STRONTIUM (ppb) Naturally-occurring element; has been used in cathode-ray tube TVs to block x-ray emissions	NA	NA	120	110-120
VANADIUM (ppb) Naturally-occurring metal; vanadium pentoxide is used as a catalyst and a chemical intermediate	NA	NA	0.3	ND-0.3
CHROMIUM-6 or Hexavalent chromium (ppb) Naturally-occurring element; used in making steel and alloys	NA	NA	0.22	0.18-0.22
4-ANDROSTENE-3,17-DIONE (ppb) Steroidal hormone naturally produced in the human body; and used as an anabolic steroid and a dietary supplement	NA	NA	0.0008	0.0006-0.0008
TESTOSTERONE (ppb) Androgenic steroid naturally produced in the human body; and used in pharmaceuticals	NA	NA	0.0001	0.0001-0.0001

TOTAL ORGANIC CARBON

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

NOTE: The Village of Addison data provided to us by the Illinois Environmental Protection Agency. The City of Chicago data provided to us by The City of Chicago.