2017 Water Quality Report

Spanish (Espanol)

Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

Is my water safe?

Mandated by the federal and state branches of the Environmental Protection Agency, routine testing has confirmed that Alsip's water meets or exceeds all water quality standards set by the Safe Drinking Water Act (SDWA). We are pleased to present the annual Water Quality Report for 2017 as required by the (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with this information because informed customers are our best allies. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings, held on the first, second, third and last Monday of each month at 7:30 PM in the village hall.

Where does my water come from and how is it treated?

The Village of Alsip purchases Lake Michigan surface water from the City of Chicago. Your water is treated in a "treatment train" (a series of processes applied in a sequence) that includes coagulation, flocculation, sedimentation, filtration, and disinfection. Coagulation removes dirt and other particles suspended in the source water by adding chemicals (coagulants) to form tiny sticky particles called "floc," which attract the dirt particles. Flocculation (the formation of larger flocs from smaller flocs) is achieved using gentle, constant mixing. The heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtration process where the water passes through sand, gravel, charcoal or other filters that remove even smaller particles. A small amount of chlorine or other disinfection method is used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before water is stored and distributed to homes and businesses in the community. Disinfection is considered to be one of the major public health advances of the 20th century.

Source water assessment and susceptibility to contamination

The Illinois EPA implemented a Source Water Assessment Program (SWAP) to assist with watershed protection of public drinking water supplies. The SWAP inventories potential sources of contamination and determines the susceptibility of the source water to contamination. The Illinois EPA has completed the SWAP for our supply. Further information on our community water supply's SWAP is available by calling the Village of Alsip Water Department at 708-385-6902. To view a summary version of the completed Source Water Assessment, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation /recommendation of Source Water Protection Efforts, you may access the Illinois EPA SWAP factsheet website at http://dataservices.epa.illinois.gov/swap/factsheet.aspx.

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, for which the Illinois EPA has set mandatory treatment of all surface water supplies. 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.

Why are there contaminants in my drinking water?

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (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 that 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Do I need to take special precautions?

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/Centers 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 (800-426-4791).

Additional Information for Lead

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 Alsip 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 at http://villageofalsip.org/wp/lead-in-drinking-water, http://www.epa.gov/safewater/lead or from the Safe Drinking Water Hotline (800-426-4791).

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information on conserving water with WaterSense certified plumbing fixtures.

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact the Water Department so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Fire sprinkler system

Water Quality Data Tables

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the quantity of certain contaminants in water provided by public water systems. The tables below list all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested for, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In these tables you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions.

IMPORTANT DRINKING WATER DEFINITIONS	
Term	**Definition**
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.
MRDLG	**Maximum Residual Disinfection Level Goal**: 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.
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.
TT	**Treatment Technique**: A required process intended to reduce the level of a contaminant in drinking water.
MRDL	**Maximum Residual Disinfectant Level**: 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.
Highest Level Detected	This column represents the highest single sample reading of a contaminant for all samples collected.
Range	This column represents the range of individual sample results, from lowest to highest, for all samples collected.
Date of Sample	If a date appears in this 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 Consumer Confidence Report calendar year.
Violation	This column indicates if a violation of an MCL, TT or AL exceedance was recorded during the CCR calendar year.
AL	**Action Level**: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
90th Percentile	The value for which 90% of the samples tested are less than or equal to and 10% are higher. This value is used to determine if the Action Level for Lead and Copper has been exceeded.
LRAA	**Locational Running Annual Average**: The average of 4 consecutive quarterly results at each monitored sample location.

Data Tabulated by the Village of Alsip Water Department

REGULATED CONTAMINANTS								
Contaminants	**MCLG or MRDLG**	**MCL or MRDL**	**Highest Level Detected**	**Range**		**Sample Date**	**Violation**	**Typical Source**
				Low	**High**			
Disinfectants & Disinfection By-Products (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (as CL2) (ppm)	4	4	0.9	0.8	1.04	2017	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	18.9(LRAA)	10.6	30.3	2017	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	NA	80	39.0(LRAA)	16.9	51.4	2017	No	By-product of drinking water disinfection
Microbiological Contaminants								
Total Coliform (positive samples/month)	0	> 1	0	NA	NA	2017	No	Naturally present in the environment

LEAD AND COPPER							
Contaminants	**MCLG**	**AL**	**90th Percentile**	**Sample Date**	**# Samples Exceeding AL**	**Exceeds AL**	**Typical Source**
Copper - action level at consumer taps (ppm)	1.3	1.3	ND	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	ND	2017	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Data Tabulated by Chicago Department of Water Management

TURBIDITY

	Treatment Technique (Limit)	Level Detected	Range		Units	Violation	Likely Source of Contamination
			Low	High			
Turbidity - Highest single measurement	1	0.26	NA	NA	NTU	No	Soil runoff
Turbidity - Lowest monthly % meeting limit	95% ≤ 0.3	100%	100%	100%	NTU	No	Soil runoff

Turbidity is a measure 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.

INORGANIC CONTAMINANTS

Contaminants	MCLG	MCL	Highest Level Detected	Range		Units	Violation	Typical Source
				Low	High			
Barium	2	2	0.0193	0.0191	0.0193	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate [measured as Nitrogen]	10	10	0.36	0.32	0.36	ppm	No	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Total Nitrate & Nitrite [measured as Nitrogen]	10	10	0.36	0.32	0.36	ppm	No	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

STATE REGULATED CONTAMINANTS

Fluoride*	4	4	0.75	0.59	0.75	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

*Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride level of 0.7 mg/L with a range of 0.6 mg/L to 0.8 mg/L.

UNREGULATED CONTAMINANTS

Sodium**	NA	NA	8.06	7.81	8.06	ppm		Erosion from naturally occurring deposits.
Sulfate	NA	NA	26.3	26.2	26.3	ppm		Erosion from 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 who have concerns about sodium intake due to dietary precautions. If you are on a sodium-restricted diet, you should consult a physician about the level of sodium in the water.

TOTAL ORGANIC CARBON (TOC)

TOC	The percentage of TOC removal was measured each month and the system met all removal requirements

RADIOACTIVE CONTAMINANTS

Contaminants	MCLG	MCL	Highest Level Detected	Range		Units	Sample Date	Violation	Typical Source
				Low	High				
Combined Radium 226/228	0	5	0.84	0.5	0.84	pCi/L	2/11/14	No	Erosion of natural deposits.
Gross alpha excluding radon and uranium	0	15	6.6	6.1	6.6	pCi/L	2/11/14	No	Erosion of natural deposits.

ABBREVIATIONS

Term	Definition
NA	Not applicable
ND	Not detectable at testing limits
NR	Monitoring not required, but recommended.
NTU	Nephelometric Turbidity Unit: used to measure the cloudiness in drinking water
ppb	parts per billion, or micrograms per liter (µg/L)
ppm	parts per million, or milligrams per liter (mg/L)
positive samples/month	Number of samples taken monthly that were found to be positive

Additional Monitoring

As part of an on-going evaluation program the EPA has required us to monitor for some additional contaminants. Information collected through the monitoring of these contaminants will help to ensure that future decisions on drinking water standards are based on sound science. In compliance with the Unregulated Contaminant Monitoring Rule 3 (UCMR3) as required by the EPA, the Village of Alsip has monitored for 28 contaminants suspected to be present in drinking water. A maximum contaminant level (MCL) for these contaminants 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 the EPA in determining the occurrence of these contaminants in drinking water and whether future regulation is warranted. The list of UCMR3 contaminants that we have monitored include volatile organic chemicals, metals, perfluorinated compounds, hormones, 1,4-dioxane and chlorate. The contaminants that were detected in this monitoring program are listed below.

UCMR3					
Contaminants	Reported Level	Range		Units	Sample Date
		Low	High		
chlorate	26.4	< 20	33	ppb	2014
chromium (total chromium)	0.4	0.2	0.5	ppb	2014
chromium-6 (hexavalent chromium)	0.2	0.14	0.23	ppb	2014
molybdenum	1.1	1.1	1.2	ppb	2014
strontium	121	113.4	138.8	ppb	2014
vanadium	0.3	0.2	0.3	ppb	2014

City of Chicago 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 one raw lake water sample collected in September 2010. Treatment processes have been optimized to provide effective barriers for the removal of Cryptosporidium 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 (LT2ESWTR) Round 2, the City of Chicago has continued the 24 months long monitoring program (April 2015 through April 2017), 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.

VIOLATION SUMMARY TABLE

We are happy to announce that no monitoring, reporting, TT, MRDL, or MCL violations were recorded during 2017.

For more information please contact:

Contact: Dan Tryban
Address: 4500 West 123rd St.
Alsip, IL 60803
Phone: 708-385-6902

LAWN WATERING RESTRICTIONS

In an effort to conserve water for fire protection, health and environmental reasons, water conservation measures are in effect from May 15th through September 15th each year.

WATER ONLY ON THESE DAYS, BETWEEN 6PM - 10AM

ODD	ODD	EVEN	EVEN
NUMBERED ADDRESSES	NUMBERED DAYS	NUMBERED ADDRESSES	NUMBERED DAYS