

Consumer Confidence Report Village of Posen IL0312520 2017

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

Annual Water Quality Report for the period of January 1 to December 31, 2017. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. The source of drinking water used by POSEN is Purchased Surface Water

The Village of Posen and all Public and Private water supplies within the State of Illinois are now required annually to publish and distribute Consumer Confidence Reports to every water user supplied by the Village. Consumer awareness/right-to-know became a major part of the 1996 Safe Water Drinking Act Amendments. The Consumer Confidence Report rule is the first new regulation from USEPA to address the public right-to-know provisions of the 1996 SWDA Amendments.

The Village Board meets on the 2nd and 4th Tuesday of each month at 6:00 p.m. and again at 6:30 p.m., at the Village Hall, 2440 Walter Zimny Drive. The meetings at 6:30pm are stated Board meetings, it is at these meetings that official action is taken.

Source Water

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.

Source Water

Source of Water: CHICAGO. 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.

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. If you would like a copy of this information, please stop by City Hall or call our water operator at 708-385-0139. 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>.

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 at (800) 426-4791.

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.

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 (800-426-4791).

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.

Definitions: The following paragraphs contain scientific terms and measures, some of which may require explanation.

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level or 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 Contaminant Level Goal or 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 residual disinfectant level or MRDL: 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.

Maximum residual disinfectant level goal or 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.

n/a: not applicable.

mrem: millirems per year (a measure of radiation absorbed by the body)

ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

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

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 Level: The concentration of a contaminant which, if 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.

Consumer Confidence Rule: The Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of water.

Abbreviations- **nd** – not detectable at testing limits. **n/a** – not applicable. **pmm** – 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 picograms per liter. **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.

Voluntary testing (Optional)

The Village of Posen receives our source of water from the Chicago Water Department which monitors for contaminants which are proposed to be regulated for which no standards currently exist, but which could provide useful information in assessing the quality of the source water for the Village of Posen.

Cryptosporidium – Analyses have been conducted monthly on the source water since April, 1993. Cryptosporidium has not been detected in these samples. 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.

Asbestos – Samples are examined for asbestos fibers on a routine basis. The EPA has determined that asbestos fibers greater than 10 microns in length could potentially cause lung cancer. We do not find fibers that are in this size category.

Haloacetic acids – additional disinfectant by-products are being monitored. We began analyzing for these compounds in July, 1998. In December, 1998 the rule was finalized which set an MCL for HAAs at 6- ppb. Thus, far testing shows that we are averaging 12.95 ppb, which is comfortably below the regulated level. The range of detections was 7.73-18.18 ppb 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.

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. 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>.

Posen Water Facts

Four compounds were detected in trace amounts well below Federal Safe Drinking Water Act Maximum Contaminant Level Goals set for public water systems throughout the country. The table included in this report lists the detected contaminants. Their presence doesn't necessarily indicate that water poses a health risk.

The Posen Water System provides safe drinking water to its residents as well as many businesses and visitors. To supply you with the safest possible product the Village of Posen chlorinates the water supply for disinfection of viruses and bacteria. The levels of this additive are monitored daily to insure proper dosages are being added.

2017 Violation Summary Table

Violation Types

MNR Monitoring Violation (failure to monitor)

MCL Maximum Contaminant Level Violation (level found exceeding regulated standard)

TTV Treatment Technique Violation (failure to meet water treatment process)

RPV Reporting Violation (failure to submit results/required report by the deadline)

******* State only violation (not a federal requirement)

Violations for your system: CCR Report

During 2017. We failed to provide to you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water. Violation Begin 7/1/2017 Violation End 7/10/2017

| Contaminants | MCLG or MRDL | MCL, TT, or MRDL | Your Water | Range | | Sample Date | Vio | Typical Source |
|---|--------------------|------------------------|---------------|----------------|------------------------|----------------|---|---|
| | | | | Low | High | | | |
| Disinfectants & Disinfectant By-Products | | | | | | | | |
| (There is convincing evidence that addition of a disinfectant is necessary for control of | | | | | | | | |
| Chlorine (as Cl ₂) (ppm) | 4 | 4 | 0.9 | 0.6 | 1.0 | 12-31-2017 | No | Water additive used to control microbes |
| Haloacetic Acids (HAA5) (ppb) | NA | 60 | 18 | 6.05 | 18.09 | 2017 | No | By-product of drinking water |
| TTHMs [Total Trihalomethanes] (ppb) | NA | 80 | 48 | 31.5 | 47.6 | 2017 | No | By-product of drinking water disinfection |
| Inorganic Contaminants | | | | | | | | |
| Fluoride (ppm) | 4 | 4 | 0.92 | 0.81 | 0.92 | 2012 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Contaminants | MCLG | AL | Your Water | Sample Date | # Samples Exceeding | Ex A | Typical Source | |
| Inorganic Contaminants | | | | | | | | |
| Lead - action level at consumer taps (ppb) | 0 | 15 | 5.68 | 8-29-2017 | 0 | No | Corrosion of household plumbing systems; Erosion of natural deposits | |

For more information please contact:

Contact Name: Jason Rhein
Address: 2440 W, Walter Zimny Dr.
Posen, IL 60469
Phone: 708-385-0139
Fax: 708-385-5107
E-Mail: PVillagomez@villageofposen.org

2017 Water Quality Data

DATA TABULATED BY CHICAGO DEPARTMENT OF WATER MANAGEMENT
0316000 CHICAGO

DEFINITION OF TERMS

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.

Highest Level Detected: This column represents the highest single sample reading of a contaminant of all the samples collected in 2017.

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

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.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

N/A: Not applicable

DETECTED CONTAMINANTS

| Contaminant (unit of measurement) Typical source of Contaminant | MCLG | MCL | Highest Level Detected | Range of Detections | Violation | Date of Sample |
|--|--|-------------------|---------------------------|---------------------|-----------|----------------|
| Turbidity Data | | | | | | |
| Turbidity (NTU/Lowest Monthly % ≤ 0.3 NTU) Soil runoff | N/A | TT(Limit 0.3 NTU) | Lowest Monthly %: 100% | 100% - 100% | | |
| Turbidity (NTU/Highest Single Measurement) Soil runoff | N/A | TT(Limit 1 NTU) | 0.26 | N/A | | |
| Inorganic Contaminants | | | | | | |
| Barium (ppm) Discharge of drilling wastes, Discharge from metal refineries, Erosion of natural deposits | 2 | 2 | 0.0193 | 0.0191 - 0.0193 | | |
| Nitrate (as Nitrogen) (ppm) Runoff from fertilizer use, Leaching from septic tanks, sewage, Erosion of natural deposits | 10 | 10 | 0.36 | 0.32 - 0.36 | | |
| Total Nitrate & Nitrite (as Nitrogen) (ppm) Runoff from fertilizer use, Leaching from septic tanks, sewage, Erosion of natural deposits | 10 | 10 | 0.36 | 0.32 - 0.36 | | |
| Total Organic Carbon (TOC) | | | | | | |
| TOC | The percentage of TOC removal was measured each month and the system met all TOC removal requirements set by IEPA. | | | | | |
| Unregulated Contaminants | | | | | | |
| Sulfate (ppm) Erosion of naturally occurring deposits | N/A | N/A | 26.3 | 26.2 - 26.3 | | |
| Sodium (ppm) Erosion of naturally occurring deposits; Used as water softener | N/A | N/A | 8.06 | 7.81 - 8.06 | | |
| State Regulated Contaminants | | | | | | |
| Fluoride (ppm) Water additive which promotes strong teeth | 4 | 4 | 0.75 | 0.59 - 0.75 | | |
| Radioactive Contaminants | | | | | | |
| Combined Radium (226/228) (pCi/L) Decay of natural and man-made deposits. | 0 | 5 | 0.84 | 0.50 - 0.84 | | 02-11-2014 |
| Gross Alpha excluding radon and uranium (pCi/L) Decay of natural and man-made deposits. | 0 | 15 | 6.6 | 6.1 - 6.6 | | 02-11-2014 |

Units of Measurement

ppm: Parts per million, or milligrams per liter

µBq: Parts per billion, or micrograms per liter

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water

% ≤ 0.3 NTU: Percent of samples less than or equal to 0.3 NTU

pCi/L: Picocuries per liter, used to measure radioactivity

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.

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

FLUORIDE

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.

SODIUM

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.

SOURCE WATER ASSESSMENT SUMMARY

Source Water Location

The City of Chicago utilizes Lake Michigan as its source water via two water treatment plants. The Jardine Water Purification Plant serves the northern areas of the City and suburbs, while the South Water Purification Plant serves the southern areas of the City and suburbs. Lake Michigan is the only Great Lake that is entirely contained within the United States. It borders Illinois, Indiana, Michigan, and Wisconsin, and is the second largest Great lake by volume with 1,180 cubic miles of water and third largest by area.

Source Water Assessment Summary

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 determined the susceptibility of the source water to contamination. The Illinois EPA has completed the Source Water Assessment Program for our supply. Further information on our community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at 312-744-6635.

Susceptibility to Contamination

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 of 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.

Further information on our community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at 312-744-6635.

2017 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 2010 in one raw lake water sample collected in September 2010. Treatment processes have been optimized to provide effective barriers for 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.

In 2017, CDWM has also continued monitoring for hexavalent chromium, also known as chromium-6. USEPA has not yet established a standard for chromium-6, a contaminant of concern which has both natural and industrial sources. Please address any questions or concerns to DWM's Water Quality Division at 312-742-7499. Data reports on the monitoring program for chromium-6 are posted on the City's website which can be accessed at the following address below:

http://www.cityofchicago.org/city/en/depts/water/supp_info/water_quality_resultsandreports/city_of_chicago_emergincontaminantstudy.html

For more information, please contact
Alan Stark, Managing Deputy Commissioner for the Bureau of Water Supply
At 312-742-7499

Chicago Department of Water Management
Bureau of Water Supply
1000 East Ohio Street
Chicago, IL 60611
Attn: Alan Stark

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by:
The City of Chicago
Department of Water Management
Water System ID# IL0316000