# VILLAGE OF BLOOMINGDALE
## DRINKING WATER QUALITY REPORT
**(From January 1, 2015 to December 31, 2015)**

This report provides important information about your drinking water and the efforts made by the **Village of Bloomingdale** water system to provide safe drinking water. The source of drinking water supplied by Bloomingdale is purchased from the **DuPage Water Commission (DWC),** which in turn is supplied to DWC under contract with the **City of Chicago**, whose water source is from Lake Michigan. For more information regarding this report, contact:

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Elias Vega, Water Production Supervisor
Phone: (630) 671-5851

## Sources of Drinking Water

Rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells are sources of drinking water including both tap water and bottled water. Water dissolves naturally occurring minerals, pick-ups substances resulting from the presence of animals, or from human activity; and in some cases absorbs radioactive material as it passes over land surfaces or through the ground.

Drinking water, including bottled water, should 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 United States Environmental Protection Agency (USEPA) 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 undergoing cancer 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. USEPA and Center for Disease Control (CDC) guidelines on ways to lessen the risk of infection by microbial contaminants such as cryptosporidium and others are available by calling the USEPA Safe Drinking Water Hotline (800) 426-4791.

## Contaminants that may be present in source water include:

Microbial contaminants – caused by viruses and bacteria, which may come from sewage treatment plant, septic system, and/or agricultural livestock discharges; and wildlife.
Inorganic contaminants - such as naturally occurring salts and metals, or resulting from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining or farming.
Pesticides and herbicides – from agriculture and residential uses and storm water runoff.
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 the interest of public health and safety, the USEPA prescribes regulations that limit the amount of certain contaminants in the water supplied by public water systems. The Food and Drug Administration (FDA) establishes and regulates contaminant limits in bottled water.

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 older water service lines, fittings, soldering materials, water meters and other plumbing fixtures. Regulating the wide variety of materials used to manufacture and construct these older plumbing system components is not feasible. However, the potential for Lead exposure can be minimized by running water from the 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 and provided from the USEPA Safe Drinking Water Hotline (800) 426-4791 or at http://www.epa.gov/safewater/lead.

## For the period of January 1, 2015 to December 31, 2015.

## Source Water Assessment

A Source Water Assessment summary is included below for your convenience.

Source Water Location

The City of Chicago draws from Lake Michigan as its source water. The water is treated at one of two (2) water treatment plants. The Jardine Water Purification Plant serves the northern areas of the City and suburbs which includes the water supplied to the DuPage Water Commission, 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 and third largest by area.

Susceptibility to Contamination

The Illinois EPA (IEPA) considers all surface water sources of community water supplies to be susceptible to potential pollution. The very nature of surface water allows contaminants to migrate into the treatment system intakes with no protection. For this reason IEPA mandates treatment for all surface water supplies in Illinois. Chicago's offshore intakes, also known as "cribs" are located at such a distance that shoreline impacts are not usually considered a factor influencing 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 intake crib locations may attract waterfowl, such as gulls and terns that frequent the Great Lakes area, thereby concentrating fecal deposits potentially compromising the source water quality. Conversely, the shore intakes are very susceptible to storm water runoff, activities in marinas, and shoreline non-point sources due to the influx of groundwater. Further information on the City of Chicago community water supply's Source Water Assessment Program is available by calling the City of Chicago, Department of Water Management at (312) 744-6635.

Citizens should be aware that everyday activities in an urban setting might have a negative impact on the source water. Efforts are being made to raise awareness of storm water drains' direct link to the lake within the identified local source water areas. A proven best management practice (BMP) for this purpose has been the identification and stenciling of storm water drains within a watershed. Stenciling along with an educational component is necessary to keep the lake a safe and reliable source of drinking water.

The Village of Bloomingdale encourages customers to keep informed of the quality of the water supply. If you would like to learn more, please contact the Utilities Division at 630-671-5830 or feel welcome to attend any of the Village's scheduled meetings by contacting the Village Hall at (630) 893-7000.

Source Water Assessment

The source assessment for our supply has been completed by Illinois EPA. If you would like a copy of this information, please stop by the Public Works Facility located at 305 Glen Ellyn Road. To view a summary version of the completed Source Water Assessment, you may access the Illinois EPA website at http://dataservices.epa.illinois.gov/swap/factsheet.aspx and select the County Search button. The Village purchases water from Chicago through the DuPage Water Commission and by selecting Bloomingdale you will be instructed to view the City of Chicago Source Water Assessment Summary.

# 2015 Water Quality

*Definition of Terms*

*The 2015 Water Quality Tables below contain scientific terms and measures, which may require explanation.*

**Maximum Contaminant Level Goal (MCLG):** The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's 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 an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

**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 a year because the concentrations do not frequently change. If no date appears in the column, monitoring of this contaminant was conducted during the CCR calendar year.

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

**Maximum Residual Disinfectant Level Goal (MRDLG)**: The level of 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 drinking water disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.

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

**ND** – "not detectable" at testing limits

**n/a** – "not applicable"

# 2015 Water Quality Tables

The following table includes contaminants detected in samples collected by the City of Chicago and the Village of Bloomingdale. All samples were collected between January 1, 2015 and December 31, 2015 unless otherwise noted with a date. The following units of measurement will assist in understanding the table.

**Units of measurement**

ppm - parts per million, or milligrams per liter
ppb - parts per billion, or micrograms per liter
NTU - Nephelometric Turbidity Unit, used to measure cloudiness in drinking water
%< 0.3 NTU - percent samples less than 0.3 NTU
pCi/l - picocuries per liter, used to measure radioactivity

## Water Quality Tables – Regulated and Detected Contaminants

| **Contaminant (unit of measurement)**<br>Typical source of contaminant | **Sample collected by** | **MCLG** | **MCL** | **Highest No. of positive** | **Range of Detections** | **Date of Sample(s)** | **Violation** |
|---|---|---|---|---|---|---|---|
| **Turbidity Data** | | | | | | | |
| ***Turbidity (%<0.3 NTU)**<br>Soil runoff | **Chicago** | n/a | TT(95%≤ 0.3NTU) | 99.7% | 99.7% - 100.0% | | N |
| ***Turbidity (NTU)**<br>Soil runoff | **Chicago** | n/a | TT(1NTU max) | 0.45 | n/a | | N |
| **Inorganic Contaminants** | **Sample collected by** | **MCLG** | **MCL** | **Highest Level Detected** | **Range of Detections** | **Date of Sample(s)** | **Violation** |
| **Barium (ppm)**<br>Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits | **Chicago**<br>**Bloomingdale** (Well Samples) | 2 | 2 | 0.0201<br>0.0543 | 0.0193 – 0.0201<br>0.0284 – 0.0543 | | N<br>N |
| **Nitrate (as Nitrogen) (ppm)**<br>Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits | **Chicago** | 10 | 10 | 0.30 | 0.28 – 0.30 | | N |
| **Total Nitrate & Nitrite (as Nitrogen) (ppm)**<br>Runoff from fertilizer use; leaching from septic tanks, sewers; erosion of natural deposits | **Chicago** | 10 | 10 | 0.30 | 0.28 – 0.30 | | N |
| **Iron (ppm)**<br>Erosion of natural deposits | **Bloomingdale** (Well Samples) | n/a | 1.0 | 1.34 | 0.479 – 1.34 | | N |
| **Manganese (ppb)**<br>Erosion of natural deposits | **Bloomingdale** (Well Samples) | 150 | 150 | 17.8 | 0 – 17.8 | | N |
| **Sodium (ppm)**<br>Erosion from naturally occurring deposits; Used in water softener regeneration | **Bloomingdale** (Well Samples) | n/a | n/a | 41 | 35 – 41 | | N |
| **Arsenic (ppb)** | **Chicago**<br>**Bloomingdale** (Well Samples) | 0 | 10 | 0.77<br>5.43 | 0.519 – 0.767<br>2.43 – 5.43 | | N<br>N |

**Arsenic -** While the Village's well water meets USEPA standards, it does contain low levels of arsenic. USEPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from the water source. USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

**Note: The Village's well supply has not supplied water to the water system since 1992. The wells are maintained and sampled pursuant to IEPA requirements to be available only in the event of an emergency causing the loss of the Lake Michigan supply from DuPage Water Commission. The Village reports well sample results to IEPA as required. These sample results are captioned "(Well Samples)".**

| **Lead and Copper** | **Sample collected by** | **MCLG** | **Action Level** | **90th Percentile** | **# of sites over AL** | **Date of Sample(s)** | **Violation** |
|---|---|---|---|---|---|---|---|
| **Copper (ppm)**<br>Corrosion of household plumbing systems; erosion of natural deposits | **Bloomingdale** | 1.3 | AL=1.3 | 0.00 | 0 | 7/1/14 – 9/30/14 | N |
| **Lead (ppb)**<br>Corrosion of household plumbing systems: erosion of natural deposits | **Bloomingdale** | 0 | AL=15 | 0.00 | 0 | 7/1/14-9/30/14 | N |
| **Disinfectant / Disinfection By-Products** | **Sample collected by** | **MCLG** | **MCLG** | **Highest Level Detected** | **Range of Detections** | **Date of Sample(s)** | **Violation** |
| **TTHMs (Total Trihalomethanes) (ppb)**<br>By-product of drinking water disinfection | **Bloomingdale** | n/a | 80 | 35 | 19.63 – 47.1 | Quarterly | N |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HAA5 (Haloacetic Acids) (ppb)**<br>By-product of drinking water disinfection | **Bloomingdale** | n/a | 60 | 17 | 11.67 – 24 | Quarterly | N |
| **Chlorine (as Cl2) (ppm)**<br>Drinking water disinfectant used to control microbes | **Bloomingdale** | **MRDLG**<br>4.0 | **MRDL**<br>4.0 | 0.7 | 0.5 – 0.8 | 1/1/15 – 12/31/15 | N |
| **Total Organic Carbon** | **Chicago** | The percentage of Total Organic Carbon (TOC) removal was measured monthly and system met all TOC removal requirements by IEPA | | | | | |
| **Radioactive Contaminants** | | | | | | | |
| **Contaminant (unit of measurement)**<br>Typical source of contaminant | **Sample Collected By** | **MCLG** | **MCL** | **Highest Level Detected** | **Range of Detections** | **Date of Sample(s)** | **Violation** |
| **Gross Alpha (pCu/L)**<br>**(excluding radon and uranium)**<br>Erosion of natural and manmade deposits | **Chicago**<br>**Bloomingdale**<br>**(Well Samples)** | 0 | 15 | 6.6<br>1.0 | 6.1 – 6.6<br>0 – 1.0 | 2/11/2014<br>10/16/2013 | N<br>N |
| **Combined Radium 226/228 (pCi/L)**<br>Decay of natural and manmade deposits | **Chicago**<br>**Bloomingdale**<br>**(Well Samples)** | 0 | 5 | 0.84<br>0.74 | 0.50 – 0.84<br>0 – 0.74 | 2/11/2014<br>10/16/2013 | N<br>N |
| **State Regulated Contaminants** | | | | | | | |
| **Fluoride (ppm)**<br>Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories | **Chicago**<br>**Bloomingdale**<br>**(Well Samples)** | 4 | 4.0 | 1.01<br>0.545 | 0.76 – 1.01<br>0.425 – 0.545 | | N<br>N |
| **Unregulated Contaminants** | | | | | | | |
| **Sulfate (ppm)**<br>Erosion of naturally occurring deposits | **Chicago** | n/a | n/a | 27.2 | 18.8 – 27.2 | | N |
| **Sodium (ppm)**<br>Erosion from naturally occurring deposits; Used in water softener regeneration | **Chicago** | n/a | n/a | 8.48 | 8.04 – 8.48 | | N |
| **Chromium (ppb)**<br>Discharge from steel and pulp mills; erosion of natural deposits | **Bloomingdale**<br>**Chicago** | n/a<br>100 | n/a<br>100 | 0.4<br>0.3 | 0.3 – 0.5<br>0.3 – 0.3 | | N |
| **Chromium (VI) (ppb)**<br>Naturally occurring element; used in making steel and other alloys | **Bloomingdale**<br>**Chicago** | n/a<br>n/a | n/a<br>n/a | 0.20<br>0.19 | 0.19 – 0.23<br>0.18 – 0.19 | | N |
| **Molybdenum (ppb)**<br>Naturally occurring element found in ores and present in plants, animals, and bacteria | **Bloomingdale**<br>**Chicago** | n/a<br>n/a | n/a<br>n/a | 1.1<br>1.1 | ND – 1.1<br>1.0 – 1.1 | | N |
| **Strontium (ppb)**<br>An alkaline earth metal that is found naturally in the minerals celestine and strontianite | **Bloomingdale**<br>**Chicago** | n/a<br>n/a | n/a<br>n/a | 119.8<br>120 | 112.3 – 132.2<br>110 - 120 | | N |
| **Vanadium (ppb)**<br>A metal that naturally occurs in many different minerals and in fossil fuel deposit; used in making steel | **Bloomingdale**<br>**Chicago** | n/a<br>n/a | n/a<br>n/a | 0.3<br>0.2 | 0.3 – 0.3<br>0.2 – 0.2 | | N |
| **Androstene-3,17-Doine (ppm)**<br>Steroidal hormone naturally produced in the human body; and used as an anabolic steroid and dietary supplement | **Chicago** | n/a | n/a | 0.0008 | 0.0006 – 0.0008 | | |
| **Testosterone (ppm)**<br>Androgenic steroid naturally produced in the human body; and used in pharmaceuticals | **Chicago** | n/a | n/a | 0.0001 | 0.0001 – 0.0001 | | |

### *Water Quality Data Table Footnotes*

**Turbidity**

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of water quality and the effectiveness of filtration 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 of 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 range of 0.9 mg/l to 1.2 mg/l until November 2015. As of November 2015, the new recommendation is an optimal fluoride level of 0.7 mg/l.

**Sodium**

There is no state/federal MCL for sodium. Monitoring is required to provide information to consumers and health officials 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.

## 2015 Violation Summary

The Village of Bloomingdale and City of Chicago had no water quality violations for calendar year 2015.