2015 Annual

Water Quality Report

Moreland District
PWS ID: IL0315910

ILLINOIS AMERICAN WATER

A Message from Illinois American Water President

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

To Our Valued Customer:

Illinois American Water is proud to be your local water service provider, and I am pleased to share with you good news about the quality of your drinking water. Each year, we provide you with our Annual Water Quality Report - and like so many years prior – we continue to supply water that meets or surpasses all state and federal water quality regulations.

This is no small task. Our employees, many of whom are also your neighbors, work hard every day to provide services critical for public health, safety and economic development. Your drinking water is monitored around the clock and tested at every stage of the treatment process. Our team is proud of this commitment to you. They are also proud of our commitment to the community in which they not only work, but live.

We know first-hand how precious our water is, so we work hard to not only protect it, but to educate about the value of water and wise water use. You may see us at local community events or hear about our mobile education center visiting your child's classroom to offer hands-on water lessons. We also provide information through our online learning center. Please visit it at www.illinoisamwater.com/learning-center.

Our team has also continued our commitment to infrastructure investments – investments that keep water pipes, fire hydrants, and water treatment facilities in good condition. Annually, we invest over $80 million to ensure quality water service delivered right to your tap.

At Illinois American Water, our customers are our top priority. We are committed to providing you with the highest quality drinking water and service possible. Please take time to review this water quality report as it provides details about the source and quality of the drinking water delivered to you in 2015. If you have suggestions or comments, please contact me at ilaw.president@amwater.com.

Thanks for allowing us to serve you.

Sincerely,

Bruce Hauk
President

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What is a Water Quality Report?

Illinois American Water issues a report annually describing the quality of your drinking water in compliance with state and United States Environmental Protection Agency (USEPA) regulations. The purpose of this report is to increase understanding of drinking water standards and raise awareness of the need to protect your drinking water sources.

At our state-of-the-art research laboratory in Belleville, Illinois, we conduct over 57,000 tests per year, checking drinking water quality at every stage of the water treatment and delivery process. In 2015, we conducted tests for hundreds of contaminants, including those with federal and state maximum allowable levels. This report provides an overview of last year's (2015) water quality results. It includes details about your water and what it contains.

Source Water Information

The source of water for Moreland community of our Chicago Metro District is surface water originating in Lake Michigan and purchased from the City of Chicago. Lake Michigan is a surface water supply used to provide drinking water for Chicago and 123 suburban communities. Illinois EPA considers all surface water sources of public water supply susceptible to potential pollution problems. Hence the reason for mandatory treatment of all public water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Primary sources of pollution in Illinois lakes can include agricultural runoff, land disposal (septic systems), and shoreline erosion. The Illinois Environmental Protection Agency (IEPA) has found that the quality of Lake Michigan has improved dramatically over the past 20 years. Lake Michigan, by volume, is the second largest Great Lake and the only one located totally within the United States.

The IEPA has completed a source water assessment for the City of Chicago and a copy is available. The IEPA considers all surface water sources to be susceptible to potential pollution problems. The City of Chicago has one near-shore intake that is considered susceptible to storm water runoff, marinas and shoreline point sources from the influx of groundwater to the lake. Two offshore intakes are located at such a distance that shoreline impacts are not a likely factor for water quality. Due to the susceptible nature of surface water, extensive treatment is required for all surface water supplies in Illinois.

A copy is available upon request by calling Tom Chinske, Water Quality Supervisor at 630-739-8849. 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.

Environmental Stewardship

Water is one of the earth's most precious natural resources. Protecting the environment helps to ensure adequate water supply for generations. Our efforts include student education, community events, environmental partnerships and internal initiatives.

Student Education: Illinois American Water reaches thousands of students each year through educational efforts. Our water quality team visits local schools to demonstrate the water treatment process. Our Mobile Education Center (MEC), an 18-foot learning center, offers hands-on water testing and fun lesson plans. These lesson plans can also be found at our website – www.illinoisamwater.com – in the learning center. We partner with Illinois leaders on Science, Technology, Engineering, Mathematics (STEM) education efforts. Students participate in annual community events like the Clean Water Celebration held in Peoria and the Water Festival in Godfrey.

Community Events: We participate in the "It's Our River Day" celebrations each September across the state. These events promote education, recreation and conservation within Illinois watersheds. Illinois American Water employees volunteer at the Mississippi Earthtones Festival in Alton. We also contribute to river cleanup efforts with the Illinois River Sweep, Vermillion River Clean Up, Living Lands and Waters Great Mississippi River Clean Up, and more.

Environmental Partnerships: As a part of our Environmental Grant Program we presented over $15,000 in 2015 for six environmental projects focused on the improvement, restoration and protection of water sources in our communities. We are continuing our multi-year agreement with Great Rivers Land Trust to reduce sedimentation of the Piasa Creek and Mississippi River. The agreement has been highlighted as a model by the USEPA. Our Champaign County team partners on the Mahomet Aquifer Consortium to protect our precious resources.

Pharmaceutical Disposal Programs: Illinois American Water has collaborated with communities to implement over 35 pharmaceutical disposal programs across the state. These efforts have led to the prevention of flushing medications and the proper disposal of hundreds of thousands pounds of unwanted medications. To learn more or to find a disposal location near you, please visit www.illinoisamwater.com under Water Quality & Stewardship.

Internal Initiatives: On a daily basis, our facilities utilize technologies such as variable frequency motors and motion sensor lighting to ensure efficient energy use. Recycling programs at company facilities also help to reduce waste and protect the environment. Illinois American Water incorporates native and prairie plantings on company property whenever possible to reduce water use and mowing costs.

The company's newest water treatment plant in Champaign County earned the first LEED® certification for a water treatment facility in Illinois. LEED is the nation's leading program for the design, construction and operation of high- performance green buildings. In addition, an upgrade at the water treatment plant in Peoria includes the incorporation of ultraviolet (UV) technology to enhance water quality.

Illinois American Water's Pontiac and Streator Districts installed ultrasonic units to effectively control algae and reduce the use of treatment chemicals. Illinois American Water also implemented solar power in the Peoria and Interurban (Metro East) Districts, decreasing electricity costs and benefiting our customers.

American Water

American Water is the largest and most geographically diverse publicly traded U.S. water and wastewater utility company. Marking its 130th anniversary in 2016, the company employs 6,700 dedicated professionals who provide regulated and market-based drinking water, wastewater, and other related services to an estimated 15 million people in 47 states and Ontario, Canada. More information can be found by visiting www.amwater.com.

Illinois American Water

Illinois American Water, a subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 1.2 million people. American Water also operates a customer service center in Alton and a quality control and research laboratory in Belleville.

Questions?

To learn more about water quality, visit our website at: www.illinoisamwater.com. For questions or copies contact **Tom Chinske, Water Quality Supervisor, at** thomas.chinske@amwater.com **or at 630-739-8849.**

Water Information Sources

Illinois American Water
www.illinoisamwater.com

United States Environmental Protection Agency
www.epa.gov/safewater

Safe Drinking Water Hotline: 800-426-4791
Illinois Environmental Protection Agency
www.epa.state.il.us

Surf Your Watershed

Locate your watershed and a host of information
http://cfpub.epa.gov/surf/locate/index.cfm

Envirofacts

Access to U.S. environmental data
www.epa.gov/enviro

Substances Expected to be in Drinking 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 can acquire naturally occurring minerals, in some cases, radioactive material and substances resulting from the presence of animals or from human activity.

Substances 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, or wildlife.

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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, may also come from gas stations, urban storm water runoff, and septic systems.

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

To ensure that tap water is of high quality, USEPA prescribes regulations limiting the amount of certain substances in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Illinois American Water's advanced water treatment processes are designed to reduce any such substances to levels well below any health concern.

Important Health Information

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC (Centers for Disease Control and Prevention) 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.

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. Illinois American Water 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 from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

How to Read the Data Tables

Illinois American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the data tables. While most monitoring was conducted in 2015, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting these tables, see the "Table Definitions" section and footnotes.

Table Definitions and Abbreviations

- Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- Compliance Achieved: Indicates that the levels found were all within the allowable levels as determined by the USEPA.
- Highest Level Detected: In most cases this column is the highest detected level unless compliance is calculated on a Running Annual Average or Locational Running Annual Average. If multiple entry points exist, the data from the entry point with the highest value is reported.
- 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.
- MRDL (Maximum Residual Disinfectant Level): The highest level of disinfectant routinely allowed in drinking water. Addition of a disinfectant is necessary for control of microbial contaminants.
- MRDLG (Maximum Residual Disinfectant Level Goal): 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 contamination.
- NA: Not applicable
- ND: Not detectable at testing limits
- pCi/L (picocuries per liter): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).
- ppm (parts per million): One part substance per million parts water, or milligrams per liter.
- ppb (parts per billion): One part substance per billion parts water, or micrograms per liter.
- Range Of Detections: The range of individual sample results, from lowest to highest, that were collected during the sample period.
- S: Single sample

2015 Water Quality Information

We are pleased to report that during the past year, the water delivered to your home or business complied with, or was better than, all state and federal drinking water requirements.

For your information, we have compiled a table showing what substances were detected in your drinking water during 2015. Although all of the substances listed are under the Maximum Contaminant Level (MCL) set by the U.S. Environmental Protection Agency (USEPA), we feel it is important that you know exactly what was detected and how much of the substance was present in

your water.

Water Quality Results

Regulated Substances (Measured in the water leaving the City of Chicago treatment facility)

Substance (units)	Year Sampled	MCLG	MCL	Amount Detected	Range of Detections	Compliance Achieved	Typical Source
Barium (ppm)	2015	2	2	0.0201	0.0193-0.0201	Yes	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)[1]	2015	4	4	1.01	0.76-1.01	Yes	Water additive that promotes strong teeth
Gross Alpha (pCi/L)	2014	0	15	6.6	6.1-6.6	Yes	Decay of natural and man made deposits
Nitrate (ppm)	2015	10	10	0.30	0.28-0.30	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Radium combined (pCi/L)	2014	0	5	0.84	0.50-0.84	Yes	Erosion of natural deposits
Total Nitrate & Nitrite (ppm)	2015	10	10	0.30	0.28-0.30	Yes	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TOC [Total organic carbon][2]	2015	NA	TT	TOC[2]	TOC[2]	Yes	Naturally present in the environment

[1] Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride level of 0.9 mg/L to 1.2 mg/L.

[2] Total organic carbon (TOC) has no health effects. However, TOC contributes to the formation of disinfection by-products. Reduction of TOC can help to minimize disinfection by-product formation. The percentage of TOC removal was measured each month and the City of Chicago water system met all TOC removal requirements set by Illinois EPA.

Other Compounds (Measured in the Moreland distribution system)

Substance (units)	Year Sampled	MCLG	MCL	Amount Detected	Range of Detections	Compliance Achieved	Typical Source
TTHMs [Total trihalomethanes] (ppb)	2015	NA	80	35	S	Yes	By-product of drinking water chlorination
HAAs [Haloacetic acids] (ppb)	2015	NA	60	7.5	S	Yes	By-product of drinking water chlorination
Chlorine (ppm)	2015	4	4	0.6	0.2-0.63	Yes	Water additive used to control microbes

Turbidity[3] – (Measured in water leaving the City of Chicago treatment facility)

Substance (units)	Year Sampled	MCLG	MCL	Amount Detected (Lowest Monthly %)	Range of Detections	Compliance Achieved	Typical Source
Turbidity (NTU) (%<0.3 NTU)	2015	NA	TT	99.7%	99.7%-100%	Yes	Soil runoff
Turbidity (NTU)	2015	NA	TT=1 NTU max	0.45	NA	Yes	Soil runoff

[3] Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The treatment technique requires that at least 95% of routine samples are less than or equal to 0.3 NTU, and no sample exceeds 1 NTU. We are reporting the percentage of all readings meeting the standard of 0.3 NTU, plus the single highest reading for the year.

Lead and Copper[4] (Collected at customers' taps within the Moreland District)

Substance (units)	Year Sampled	MCLG	Action Level	90th Percentile	Number of Samples Collected	Number of Samples Above Action Level	Compliance Achieved	Typical Source
Copper (ppm)	2015	1.3	1.3	0.175	10	0	Yes	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)[5]	2015	0	15	4	10	0	Yes	Corrosion of household plumbing systems; Erosion of natural deposits

[4] Compliance with the Lead and Copper Rule (LCR) is determined by the levels of lead and copper found in samples taken from customers' taps. LCR requirements are met if the 90th percentile of all samples taken does not exceed the action level of 15 ppb for lead or 1.300 ppm for copper.

[5] 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 levels of lead in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to two minutes before using tap water. Additional information is available from the EPA's Safe Drinking Water Hotline 800-426-4791.

Unregulated Substances (Measured in the water leaving the City of Chicago treatment facility)

Substance (units)	Year Sampled	MCLG	MCL	Amount Detected	Range of Detections	Compliance Achieved	Typical Source
Sodium (ppm) [6]	2015	NA	NA	8.48	8.04-8.48	Yes	Erosion of naturally occurring deposits; By-product of water softening
Sulfate (ppm) [7]	2015	NA	NA	27.2	18.8-27.2	Yes	Erosion of naturally occurring deposits

[6] 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 you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

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

The IEPA requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data in the table above, though accurate, is more than one year old.

Unregulated Contaminant Monitoring Rule (UCMR3)[7] (Measured in the City of Chicago District)

Substance (units)	Year Sampled	Amount Detected (average)	Range of Detections (lowest – highest)	Typical Source
Chromium (ppb)	2015	0.3	0.3-0.3	Naturally occurring element; used in making steel and other alloys; used for chrome plating, dyes, and pigments, leather tanning, and wood preservation
Chromium 6 (ppb)	2015	0.19	0.18-0.19	Naturally occurring element; used in making steel and other alloys; used for chrome plating, dyes, and pigments, leather tanning, and wood preservation.
Molybdenum (ppb)	2015	1.1	1.0-1.1	Naturally-occurring element found in ores and present in plants, animals, and bacteria; commonly used form molybdenum trioxide used as a chemical reagent.
Strontium (ppb)	2015	120	110-120	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 (ppb)	2015	0.2	0.2-0.2	Naturally-occurring elemental metal; used as vanadium pentoxide which is a chemical intermediate and a catalyst.

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