



# THE CITY OF WILMINGTON - 2018 ANNUAL WATER QUALITY REPORT

## WATER SYSTEM # - IL 1971100 REPORT PERIOD JANUARY 1ST TO DECEMBER 31ST OF 2018

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 primary source of drinking water used by Wilmington is Surface Water (Kankakee River). For more information regarding this report contact: Ryan B. Foster at (815) 476-6732

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

### Sources of Drinking Water

The primary source of drinking water for Wilmington is surface water from the Kankakee River. We also have a back up deep well for emergencies. 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, power plant operations and mining activities.

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 healthcare 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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline([epa.gov/safewater/lead](http://epa.gov/safewater/lead)).

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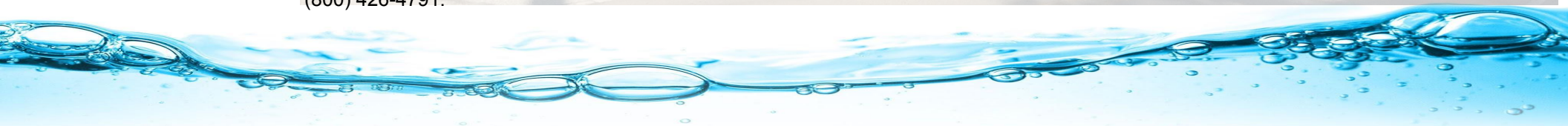
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**THE CITY OF WILMINGTON WATER DEPARTMENT TAKES GREAT PRIDE IN OUR COMMUNITIES WATER SUPPLY BY MAINTAINING COMPLIANCE WITH ILLINOIS ENVIRONMENTAL PROTECTION AGENCY AND THE ILLINOIS DEPARTMENT OF PUBLIC HEALTH. NO MONITORING, NOR ANY COMPLIANCE VIOLATIONS WERE ISSUED DURING 2018.**

## Lead Awareness & Drinking Water

### What is Lead?

Lead is a bluish gray, silvery metal, which is naturally occurring metal found throughout the environment. Throughout the years, lead has been used in a variety of purposes and applications such as cosmetics, jewelry, ammunition, paint, plumbing, plastics production and as a gasoline additive. Significant health hazards associated with lead have been recognized and its use progressively banned in the US since the 1970s. The Illinois Department of Public Health states the primary source of lead exposure is due to the deterioration and disturbance of lead based paints.

### Lead In Drinking Water

The City of Wilmington's drinking water supply is essentially free of Lead when it leaves the water treatment plant, however lead enters drinking water primarily as a result of corrosion or wearing away of materials in the water distribution system (Ex: household plumbing fixtures, lead piping, and or copper piping with lead solder). This can permit lead to leach into the home's water supply when water is left standing in the pipes for several hours. Properties built after January 1986 are most likely to contain copper piping, while homes built prior to 1986 are more than likely to have lead pipes, fixtures, and or solder, and homes built prior to 1930 are likely to have lead plumbing systems.

### What Are The Health Effects of Lead?

Exposure to lead can cause serious health problems if too much enters your body, whether it is from drinking water or from other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. Scientists have linked the effects of lead on the brain with lowered IQ in children. The greatest risk of lead exposure is to infants whose growing bodies tend to absorb more lead than the average adult, especially if formula is prepared with water containing elevated levels of lead. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. High levels of lead during pregnancy can cause miscarriage and stillbirth along with other pregnancy problems such as low birth weight/poor growth, premature delivery, and preeclampsia.

### How Can I Reduce The Exposure to Lead in Drinking Water?

1. **Flush your pipes prior to using water for drinking, formula, and or cooking.** If water hasn't been used in several hours, run water from the tap being used for at least 3 minutes. **Use cold water** for drinking, cooking, and preparing baby formula. **Do not boil water** to remove lead. Do not cook, drink, or make baby formula from the hot water tap.
2. Bottled drinking water should be used by pregnant women, breastfeeding women, young children, and formula-fed infants at homes where lead has been detected at levels greater than 15 ppb.
3. **Use water filters or treatment devices** to remove lead. Filters must be certified to meet NSF Standard 53, and specifically certified for removing lead.
4. **Remove and clean faucet aerators.** Lead particles and sediment can collect in the aerator screens. Clean aerator screens regularly.
5. **Remove older plumbing fixtures and replace with lead-free fixtures.** Install fixtures and fittings that contain 0.25 percent lead or less.
6. **Replace lead service lines (pipes).** Replace your lead service line with copper pipe.

### Wilmington Water Department & Lead monitoring.

The water department is dedicated to ensuring that our community's water supply meets IEPA and IDPH compliance and safety regulations for lead. We do this by routine sampling of houses under the federal and state lead and copper rule, monitor and control pH levels of the water to reduce corrosivity, add blended phosphate to aid in corrosion control, material inventorying of the distribution system, residential service line surveys, residential line inspections, and removing lead services when discovered.

Please contact the Wilmington Water Department at [\(815\)-476-6732](tel:8154766732) or the Director of Public Works at [\(815\)-476-2175](tel:8154762175) ext. 226 with any additional questions or concerns



# 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 (815)476-6732. 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>.

Source of Water: WILMINGTON Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection.

## 2018 Regulated Contaminants Detected

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

**Action Level Goal (ALG):** The level of 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.

**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.

**mg/L:** milligrams per liter - or one ounce in 7,350 gallons of water.

**na:** 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:** 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.

## Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform of E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 Positive Monthly Sample.	1		0	No	Naturally present in environment.

## Lead & Copper

Lead & Copper	Date Sample	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/14/2016	1.3	1.3	0.12	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	07/14/2016	0	15	3.1	2	ppb	No	Erosion of natural deposits; Corrosion of household plumbing systems.



## 2018 Regulated Contaminants Detected

<b>Disinfectants and Disinfection By-Products</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Chloramines	12/31/18	1.7	0.95 - 2.0	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2018	25	17 - 32.6	No goal for The total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	53	27.6 - 78.3	No goal for The total	80	ppb	No	By-product of drinking water disinfection.
<b>Inorganic Contaminants</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Arsenic	2018	2.6	0 - 2.6	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production waste
Barium	2018	0.016	0.0077 - 0.016	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2018	5	0 - 5	100	100	ppb	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	2018	0.8	0.816 - 1.27	4.0	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Iron	2018	0.99	0.03	0.99	1.0	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Manganese	2018	27	0 - 27	150	150	ppb	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
Nitrate [measured as Nitrogen]	2018	3	0 - 3.4	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2018	4.3	0 - 4.3	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; discharge from mines.
Sodium	2018	17	17 - 240			ppm	No	Erosion from naturally occurring deposits: Used in water softener regeneration.
Zinc	2018	0.01	0.01 - 0.025	5	5	ppm	No	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal.
<b>Radioactive Contaminants</b>	<b>Collection Date</b>	<b>Highest Level Detected</b>	<b>Range of Levels Detected</b>	<b>MCLG</b>	<b>MCL</b>	<b>Units</b>	<b>Violation</b>	<b>Likely Source of Contamination</b>
Combined Radium 226/228	2018	23	23-23	0	5	pCi/L	No	Erosion of natural deposits. (Emergency Well Only)
Gross alpha excluding radon and uranium	2018	22.1	22.1 - 22.1	0	15	pCi/L	No	Erosion of natural deposits. (Emergency Well Only)
Tritium	2018	3820	14.6 - 3820		20,000	pCi/L	No	Erosion of natural deposits. Braidwood Exelon Generating Station
<b>Turbidity</b>		Limit (Treatment Technique)		Level Detected			Violation	<b>Likely Source of Contamination</b>
Highest Single Measurement		1 NTU		0.24 NTU			No	Soil Runoff
Lowest monthly % meeting limit		0.3 NTU		100%			No	Soil Runoff
<b>Information Statement:</b> Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of the water quality and the effectiveness of our filtration systems and disinfectants.								
<b>Total Organic Carbon</b>								
The percentage of Total Organic Carbon (TOC) removal was measured each month and the system meet all TOC removal requirements set, unless a TOC violation is noted in the violations sections.								

