



THE CITY OF WILMINGTON - 2022 ANNUAL WATER QUALITY REPORT

WATER SYSTEM # - IL 1971100 REPORT PERIOD JANUARY 1ST TO DECEMBER 31ST OF 2022

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. Deep Well #3 is an available backup source 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 stormwater 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 stormwater 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 stormwater 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).

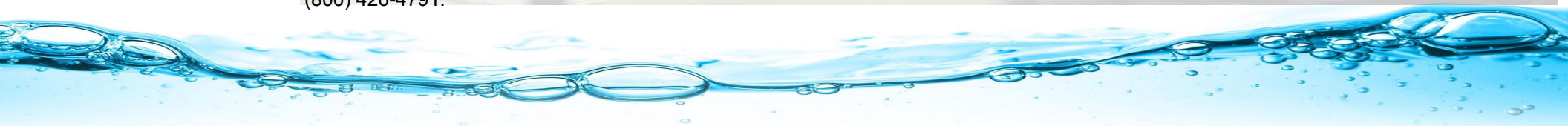
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Source Water Assessment

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.

2022 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)

PFAS: per- and polyfluoroalkyl substances

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. 1 milligram per Liter (mg/L)

ppt: parts per trillion - or 1 nanogram per Liter (ng/L).

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	0	0		0	No	Naturally present in environment.

PFAS: per- and polyfluoroalkyl substances

As part of the State of Illinois's PFAS Statewide Investigation in 2021, Wilmington's water was sampled for eighteen PFAS compounds. 3 of the 18 PFAS compounds were detected. Results are shown in the table below. At this time, no enforceable federal or state drinking water standard, called a Maximum Contaminant Level or MCL, exists for any of the more than 5,000 known PFAS chemicals. Illinois EPA is in the process of collecting data in the PFAS Investigation Network to develop a state MCL. For additional information <https://www2.illinois.gov/epa/topics/water-quality/pfas/pages/pfas-healthadvisory.aspx> or go to <https://www.wilmington-il.com/water-1>.

PFAS Analyte	Acronym	Health-Based Guidance Level (ng/L)	Results (ng/L)
Perfluorobutanesulfonic acid	PFBS4	2,100	2.1
Perfluorooctanesulfonic acid	PFOS	14	2.2
Perfluorohexanoic acid	PFHxA	560,000	6.7



2022 Regulated Contaminants Detected

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chloramines	2022	2.1	1.39 - 2.54	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2022	47.0	26.6 - 56.9	No goal for The total	60	ppb	No	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	67.0	48.5 - 106.3	No goal for The total	80	ppb	No	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2022	1	0.657 - 0.657	0	10	ppb	No	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronics production wastes.
Barium	2022	0.012	0.012 - 0.012	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2022	0.8	0.79 - 0.79	4.0	4.0	ppm	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2022	3.0	0 - 3.3	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2022	3.0	3.21 - 3.21	50	50	ppb	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium	2022	22	21.7 - 21.7			ppm	No	Erosion from naturally occurring deposits; Used in water softener regeneration.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Tritium	2022	7077	0.0 - 7077		20,000	pCi/L	No	Erosion of natural deposits. Braidwood Exelon Generating Station
Turbidity	Limit (Treatment Technique)			Level Detected		Violation		Likely Source of Contamination
Highest Single Measurement	1 NTU			0.05 NTU		No		Soil Runoff
Lowest monthly % meeting limit	0.3 NTU			100%		No		Soil Runoff
Information Statement: 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.								
Total Organic Carbon								
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.								

2022 Source Water Sampling Data for Back-Up Well #3 is available upon request.



THE CITY OF WILMINGTON WATER DEPARTMENT HAD 2 VIOLATIONS ISSUED DURING THE YEAR 2022

Lead & Copper Rule:	The Lead & Copper Rule protects the public health by minimizing lead and copper levels in the drinking water, primarily by reducing water corrosivity. Lead & Copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.		
Violation Type	Violation Begin	Violation End	Violation Explanation
Lead Consumer Notice	12/30/2022	01/05/2023	We failed to provide state the "Lead Consumer Informational Notice Certification Form" that certified we completed the required 30 days notice for residential results. However, all residents were informed with in the required 30 days notice requirement.

Total Organic Carbon	Total organic carbon has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include Trihalomethanes (THMs) and Haloacetic acids (HAAs). Drinking water containing these byproduct in excess of the MCL may lead to adverse health.		
Violation Type	Violation Begin	Violation End	Violation Explanation
Monitoring, Routine (DBP) major	01/01/2022	03/31/2022	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

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.**
- 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:815-476-6732) or James Gretencord Director of Public Works at [\(815\) 476-2175](tel:815-476-2175) with any additional questions or concerns.

Lead & Copper	Date Sample	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2022	1.3	1.3	0.209	0	ppm	No	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.
Lead	2022	0	15	2.49	1	ppb	No	Erosion of natural deposits; Corrosion of household plumbing systems.

