

## Annual Drinking Water Quality Report 2021

PWS ID: IL0970340

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This is your annual Water Quality Report for the period of January 1, 2021 through December 31, 2021. Each year the Village issues this report to provide you information about the quality of our drinking water, the source of our water, how it is treated and the regulated compounds it contains. These reports are issued in compliance with the Safe Drinking Water Act. For more detailed information about our water's quality, please contact the Village at 847-634-9440 or our Consultant, Gewalt Hamilton Associates, Inc at 847-478-9700.

### Source of 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 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.

The source of our water is ground water from two deep wells. The water is treated through filtration and ion exchange softening. We add sodium hypochlorite to disinfect the water before it enters the ground storage reservoir. The water is then pumped from the reservoir, into the water distribution system.

Results of the most recent water sample analysis following treatment may be found on pages 3,4 & 5 of this report. Raw water (before treatment) analysis data is available upon request.

### Source Water Assessment

The source water assessment for this system has not yet been completed by the Illinois EPA. IEPA is required to complete source water assessments for all public water supplies. When this assessment becomes available, we will summarize the results and incorporate the information into future reports. To view a summary version of the completed Source Water Assessments, including:

- Importance of Source Water
- Susceptibility to Contamination Determination
- 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>

## Contaminants

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.

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](tel:8004264791)

## Ensuring Safe Drinking Water

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](tel:8004264791)

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 [\(800\) 426-4791](tel:8004264791) or at <http://www.epa.gov/safewater/lead>

## Understanding This Report

In order to help you understand this report, here are some abbreviations and definitions that may be contained in it.

<b>AL: Action Level</b>	The concentration of a contaminant which if exceeded, triggers treatment or other requirements which a water system must follow.
<b>ALG: Action Level Goal</b>	The Level of a contaminant below which there is no known or expected health risk.
<b>Avg: Average</b>	Average
<b>Level 1 Assessment</b>	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.
<b>Level 2 Assessment</b>	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.
<b>MCL: Maximum Contaminant Level</b>	The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to MCLG's as feasible using the best available treatment technology.
<b>MCLG: Maximum Contaminant Level Goal</b>	The level of a contaminant in drinking water below which there is no known or expected risk to health.
<b>MRDL: Maximum Residual Disinfectant Level</b>	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.
<b>MRDLG: Maximum Residual Disinfectant Level Goal</b>	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.
<b>N/A: Not Applicable</b>	Not Applicable
<b>MREM</b>	Millirems per year (a measure of radiation absorbed by the body)
<b>PPM: Parts Per Million</b>	Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
<b>PPB: Parts Per Billion</b>	Micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
<b>pCi/L: Picocuries Per Liter</b>	A measure of radioactivity in drinking water.
<b>TT:Treatment Technique</b>	A required process intended to reduce the level of a contaminant in drinking water.

## Lead and Copper

Contaminant	Date	ALG	AL	90 <sup>th</sup> Percentile	# of Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2021	1.3	1.3	.205	0	PPM	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2021	0	15	3.3	0	PPB	N	Corrosion of household plumbing systems; Erosion of natural deposits.

## Disinfectants and Disinfectant By-products

Contaminant	Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Chlorine</b>	12/31/21	1	.71 – 1.2	MRDLG = 4	MRDL = 4	PPM	N	Water additive used to control microbes.
<b>Total Trihalomethanes TTHM</b>	8/11/20	4.13	4.13-4.13	No goal	80	PPB	N	By-product of drinking water disinfection.

## Inorganic Contaminants

Contaminant	Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Barium</b>	2021	0.018	.018 - .018	2	2	PPM	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Fluoride</b>	2021	1.05	1.05-1.05	4	4.0	PPM	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Iron</b>	2021	.23	0.23 – 0.23		1.0	PPM	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits.
<b>Manganese</b>	2021	3.5	3.5 – 3.5	150	150	PPB	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Erosion of natural deposits..
<b>Sodium</b>	2021	94	94-94			PPM	N	Erosion from naturally occurring deposits. Used in water softener regeneration.

<b>Zinc</b>	2021	0.028	0.028 – 0.028	5	5	PPM	N	This contaminant is not currently regulated by the USEPA. However, the state regulates. Naturally occurring; discharge from metal.
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### Radioactive Contaminants

Contaminant	Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Combined Radium 226/228</b>	1/14/20	4.06	4.06– 4.06	0	5	pCi/L	N	Erosion of natural deposits.
<b>Gross Alpha Excluding radon and uranium</b>	1/14/20	5.38	5.38 – 5.38	0	15	pCi/L	N	Erosion of natural deposits.

### Violation Table

<b>Lead and Copper Rule</b>				
<b>The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.</b>				
Violation Type	Violation Begin	Violation End	Violation Explanation	Corrective action
LEAD CONSUMER NOTICE (LCR)	12/30/2020	01/14/2021	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.	Results were provided to the customers at the location water was tested shortly after the 30 day period.