



2023 Water Quality Report – Sample Results for Calendar Year 2022



The City of Warrenville has developed and published this report, as per the requirements of the *Federal Safe Drinking Water Act*, to inform our customers as to the source and safety of Warrenville’s drinking water.

This year, as in years past, Warrenville tap water met all United States Environmental Protection Act (USEPA) drinking water health standards. The City vigilantly safeguards the system and groundwater supply and had no violation of a contaminant level in 2022. This report summarizes the quality of water provided last year, including details about the water source, what is contained in the water, and how it compares to standards set by regulatory agencies.

If you have any questions concerning this report, or concerning Warrenville’s water system, please contact John Satter, Utility Maintenance Superintendent, at 630-836-3051, Monday through Friday, 7:00 a.m. to 3:00 p.m. A Committee of the Whole meeting, concerning Public Works and Infrastructure issues, is held bi-monthly at 7:00 p.m., in City Hall Council Chambers, located at 28W701 Stafford Place, Warrenville, Illinois. Meetings are posted on

the bulletin boards inside both main entrances to the City Hall, and also online at <http://www.warrenville.il.us/>. You can call City Hall at 630-836-3050 to obtain the meeting dates. Water issues are discussed in open forums on an “as needed” basis.

The City uses groundwater provided by four wells drilled into the Silurian–Devonian aquifer. An aquifer is a geological formation that contains water. The wells are drilled to an average depth of 300 feet. The location of the wells are as follows: Well 9 is located at 27W601 Warrenville Road, Well 10 is located at 30W194 Batavia Road, Well 11 is located at 4S255 River Road, and Well 12 is located at 2S900 Timber Drive.

Warrenville homes normally receive a mixture of water from Wells 9, 10, 11, and 12 that utilize iron removal equipment in the production process, thus removing iron from the water before it enters the distribution system. The City has implemented a corrosion control program that uses blended phosphates to coat the interior pipe lining. Chlorine is added for disinfection and fluoride is added to help promote oral health.

A source-water assessment conducted by the Illinois Environmental Protection Agency (IEPA) indicated the ground water is not vulnerable to any contaminants. The assessment is available for public viewing at the City Hall, or online at <http://il-warrenville.civicplus.com/DocumentCenter/View/2141>.

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. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA’s Safe Drinking Water Hotline (1-800-426-4791).

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 USEPA Safe Drinking Water Hotline at 1-800-426-4791, or <http://www.epa.gov/safewater>.



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 line and home plumbing. The City cannot control the variety of materials used in plumbing components.

When water has been sitting in the pipes for several hours, it is possible to 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 can 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>.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, and wells. All of Warrenville's tap water is obtained from wells. As water travels over the surface, or through the ground, it can dissolve naturally occurring minerals and pick up substances resulting from the presence of animal or human activity. Possible contaminants consist of: **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 runoff, industrial or domestic wastewater discharges, oil and gas production, or farming; **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water, 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 may be naturally occurring.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water supplies. Federal Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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

Definitions and Abbreviations

- AL:** Action Level, or the concentration of a contaminant which, when 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 a 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 E. coli MCL violation has occurred and/or why total coliform bacteria have been found in a water system on multiple occasions.
- MCL:** Maximum Contaminant Level, or 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, or 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 allowed in the water.
- MRDLG:** Maximum residual disinfectant level goal.



BETA/PHOTON EMITTERS: The MCL for beta particles is 4 milligrams/year. EPA considers 50 pCi/l to be a level of concern for Beta particles.
DF: Dilution factor.

FLUORIDE: Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride Level of 0.6 To 0.8 ppm.

MREM: Millirems per year (a measure of radiation absorbed by the body).

MFL: Million fibers per liter, used to measure asbestos concentration.

N/A: Not applicable.

ND: Not detectable at testing limits.

NITRATE: Nitrates in drinking water at levels above 10 ppm are a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should consult your health care provider.

NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water.

PCI/L: Picocuries per liter, used to measure radioactivity

PPM: Parts per million or milligrams per liter.

PPB: Parts per billion or micrograms per liter.

PPT: Parts per trillion or Nano grams per liter.

RDL: Report detection limit.

SODIUM: There is not a 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 the level is greater than 20 mg/l, and you are on a sodium restricted diet, you should consult your health care provider.

Volatile Organic Compounds: Volatile Organic Chemicals (VOCs) are solvents that have been widely used as cleaning agents, De-greasers, and as intermediate chemicals in manufacturing. There are 21 regulated VOCs.

The “**Range of Detections**” column represents a range of individual sample results, from lowest to highest, that were collected during the CCR calendar year.

Treatment Technique or TT – A required process intended to reduce the level of a contaminant in drinking water.



2022 Water Quality Data

Note: The state requires monitoring for certain contaminants less than once per year as concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old.

Lead and Copper Likely source of contamination is from corrosion of household plumbing. Samples of the wells have not indicated any traces of lead or copper in the water supply.

| Lead & Copper | Date Sampled | MCLG | Action Level (AL) | 90 th Percentile | Number of Sites Over AL | Violation | Likely Source of Contamination |
|---------------|--------------|---------|-------------------|-----------------------------|-------------------------|-----------|---|
| Copper | 2022 | 1.3 ppm | 1.3 ppm | .484 ppm | 0 | NO | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing. |
| Lead | 2021 | 0 ppb | 15 ppb | 0 ppb | 1 | NO | Corrosion of household plumbing systems; Erosion of natural deposits. |

National Secondary Standards – Non-enforceable guidelines regulating contaminants that may cause cosmetic effects or aesthetic effects in drinking water. USEPA recommends secondary standards to water systems but does not require systems to comply.

| Inorganic Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | Unit of Measurement | MCLG | MCL | Violation | Likely Source of Contamination |
|------------------------|-----------------|------------------------|--------------------------|---------------------|------|-----|-----------|--------------------------------|
| Sulfate | 2018 | 247 | 118 - 247 | ppm | N/A | 250 | NO | Erosion of natural deposits |
| Total Dissolved Solids | 2018 | 918 | 530 -918 | ppm | N/A | 500 | NO | Erosion of natural deposits |

Regulated Contaminants

Note: For each location sampled (in most cases, each active entry point), a quarterly average is calculated using all routine/confirmation samples collected during the quarter. Next, an annual average is calculated for each location by adding the quarterly averages and dividing by four. The location sampled with the highest annual average is used in the table.

| Inorganic Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | Unit of Measurement | MCLG | MCL | Violation | Likely Source of Contamination |
|------------------------|-----------------|------------------------|--------------------------|---------------------|------|-----|-----------|--|
| Barium | 2021 | 0.132 | .0862-.132 | ppm | 2 | 2 | NO | Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits. |
| Chromium | 2021 | 5.65 | 0-5.65 | ppb | 100 | 100 | NO | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Fluoride | 2021 | .81 | .57-.81 | ppm | 4 | 4 | NO | Erosion of naturally occurring deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |



Regulated Contaminants Continued

| Inorganic Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | Unit of Measurement | MCLG | MCL | Violation | Likely Source of Contamination |
|--|-----------------|------------------------|--------------------------|---------------------|-------------------|---------|-----------|--|
| Arsenic | 2018 | ND | ND | ppb | 0 | 10 | NO | Erosion of natural deposits; Runoff from orchards, glass, and electronics production wastes. |
| Iron | 2018 | .365 | 0 - .365 | ppm | | 1.0 | NO | This contaminant is not regulated by the USEPA but is regulated by the State. Erosion of natural occurring deposits. |
| Selenium | 2018 | 2.27 | 0 - 2.27 | ppb | 50 | 50 | NO | Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines. |
| Sodium | 2021 | 61.5 | 28.5 – 61.5 | ppm | | | NO | Erosion from naturally occurring deposits; Used in water softener regeneration. There is not a 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. |
| Radioactive Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | Unit of Measurement | MCLG | MCL | Violation | Likely Source of Contamination |
| Combined Radium | 2022 | 1.59 | 1.59 – 1.59 | PCI/L | 0 | 5 | NO | Erosion of natural deposits. |
| Gross Alpha excluding radon and uranium | 10/23/2017 | .97 | .97 - .97 | PCI/L | 0 | 15 | NO | Erosion of natural deposits. |
| Disinfectants & Disinfections Byproducts | Collection Date | Highest Level Detected | Range of Levels Detected | Unit of Measurement | MCLG | MCL | Violation | Likely Source of Contamination |
| Total Halo acetic Acids (HAA5) | 2022 | 4 | 1.7 – 4.2 | ppb | No goal for total | 60 | NO | By-product of drinking water chlorination. |
| Chlorine | 12/31/2022 | 2.1 | 1.7- 2.4 | ppm | MRDLG=4 | MRDLG=4 | NO | Water additive used to control microbes. |
| Total Trihalomethanes | 2022 | 6 | 4 – 5.8 | ppb | No goal for total | 80 | NO | By-product of drinking water disinfection. |



Regulated Contaminants Continued

| Synthetic organic contaminants including pesticides and herbicides | Collection Date | Highest Level Detected | Range of Levels Detected | Unit of Measurement | MCLG | MCL | Violation | Likely Source of Contamination |
|--|-----------------|------------------------|--------------------------|---------------------|------|-----|-----------|--|
| Benzo(A)pyrene | 2019 | ND | ND | ppb | Zero | .2 | NO | Leaching from linings of water storage tanks and distribution lines. |
| Heptachlor | 2021 | 43 | 0 - 43 | ppt | 0 | 100 | NO | Residue of banned temiticide. |

Coliform Bacteria

| Maximum Contaminant Level Goal | Total Coliform Maximum Contaminant Level | Highest No. of Positive | Fecal Coliform or 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 | 0 | 0 | 0 | NO | Naturally present in the environment. Raw water sample failed, resampled and it passed. Likely source human error. |



Violations Table

| Volatile Organic Compounds (1,1-Dichloroethylyne, 1,2-Dichloroethane, 1,2-Dichloropropane, Benzene, Carbon Tetrachloride, Chlorobenzene, Dichloromethane, Ethylbenzene, Styrene, Tetrachloroethylene, Toluene, 1,1,1-Trichloroethylene, 1,1,2-Trichloroethylene, 1,2,4-Trichlorobenzene, Vinyl Chloride, Xylenes, cis-1,2-Dichloroethylene, o-Dichlorobenzene, p-Dichlorobenzene, trans-1,2-Dichloroethylene) | | | |
|---|-----------------|---------------|---|
| <p>Some people who drink water containing <u>1,1-dichloroethylene</u> in excess of the MCL over many years could experience problems with their liver.</p> <p>Some people who drink water containing <u>1,2-dichloroethane</u>, <u>1,2-dichloropropane</u>, <u>vinyl chloride</u> in excess of the MCL over many years may have an increased risk of getting cancer.</p> <p>Some people who drink water containing <u>benzene</u> in excess of the MCL over many years could experience anemia or decrease in blood platelets, and may have an increased risk of getting cancer.</p> <p>Some people who drink water containing <u>xylenes</u> in excess of the MCL over many years could experience damage to their nervous system.</p> <p>Some people who drink water containing <u>carbon tetrachloride</u>, <u>1,1, 2-trichloroethylene</u>, <u>trichloroethylene</u>, in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.</p> <p>Some people who drink water containing <u>1,2,4-trichlorobenzene</u> well in excess of the MCL over many years could experience changes in their adrenal glands.</p> <p>Some people who drink water containing <u>1,1,1-trichloroethane</u> in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.</p> <p>Some people who drink water containing <u>toluene</u> well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.</p> <p>Some people who drink water containing <u>cis-1,2-dichloroethylene</u>, <u>trans-1,2-dichloroethylene</u> in excess of the MCL over many years could experience problems with their liver.</p> <p>Some people who drink water containing <u>o-dichlorobenzene</u>, <u>styrene</u> well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory system.</p> <p>Some people who drink water containing <u>p-dichlorobenzene</u> in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.</p> <p>Some people who drink water containing <u>chlorobenzene</u>, <u>ethylbenzene</u> in excess of the MCL over many years could experience problems with their liver or kidneys.</p> <p>Some people who drink water containing <u>dichloromethane</u>, <u>tetrachloroethylene</u> in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.</p> | | | |
| Violation Type | Violation Begin | Violation End | Violation Explanation |
| Monitoring, Routine Major | 01/01/2020 | 12/31/22 | We failed to test our drinking water for the contaminant and period indicated at two of our four pumping stations. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated for that contaminant. These contaminates have been tested during the month of April, 2023, and the results were: ND Analytic NOT DETECTED at or above the reporting limit |



WATER
AMBASSADOR
COMMUNITY

 American Water Works Association
Illinois Section

GOLD
LEVEL AWARD

Monitoring Violations Annual Notice

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for City of Warrenville

Our water system violated one drinking water standard over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2021 we did not complete all monitoring or testing for Volatile Organic Compounds and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant we did not properly test for during the last year, how often we are supposed to sample for Volatile Organic Compounds (VOC), how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

| Contaminant | Required sampling frequency | Number of samples taken | When all samples should have been taken | When samples were or will be taken |
|----------------------------|-------------------------------|--|---|------------------------------------|
| Volatile Organic Compounds | Every 3 years, 4 sample sites | 2 Sample Sites out of 4 were collected | 2021 | 2023 |

What happened? What is being done?

The accredited lab that managed our compliance along with providing sample bottles, never sent notice or a sample bottle for two of our well houses. By the time Warrenville was notified of the missing sample it was too late to be compliant. Warrenville's corrective action for this was to switch accredited labs and work directly with the State of Illinois lab in Springfield. Samples taken from these sites in April of 2023 resulted in a ND Analytic NOT DETECTED at or above the reporting limit.

For more information, please contact John Satter at 630-836-3051 or jsatter@warrenville.il.us

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by the City of Warrenville.

Water System ID# IL0430833

Date distributed 6/4/2023



525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • www.dph.illinois.gov

0430833 WARRENVILLE

March 23, 2023

3S 258 Manning Ave.
Warrenville IL 60555

Date: 2/2022

Result: 0.5

Dear Community Water System Personnel:

The Illinois Department of Public Health officially recognizes and commends your community water system for its high degree of compliance for water fluoridation with the **Illinois Public Water Supply Regulation Act [415 ILCS 40/7a]**. You are receiving this **Honorable Mention Award for maintaining compliance for 11 months during 2022**.

You are receiving an Honorable Mention Award because there was a missing result from at least one month. The date of the missing result is listed above. A zero indicates that we do not have a result for that month. If you feel this is in error, please email the missing month laboratory result to DPH.OralHealthIFRS@Illinois.gov.

Community water fluoridation is a highly effective disease prevention program that on a year basis reaches 98.4% of the Illinois population. Community water fluoridation has been shown to save money both for families and for the US health care system. Maximum oral health benefits are provided to the public when the levels of fluoride are maintained within the optimal range. Water operators who maintain the correct level of fluoride in the drinking water contribute more towards preventive oral health measures of communities than the combined efforts of all oral health professionals. The Department acknowledges the expertise and diligence of your water department and encourages you to share this information with the governing body of your community.

I encourage your water supply to maintain good operational practices and hope you will receive additional compliance awards in the future. Should you have any questions, please contact the Oral Health Section at (217) 785-4899.

Congratulations on a job well done!

Sincerely,

Mona Van Kanegan, DDS, MS, MPH
Oral Health Section, Chief