Annual Drinking Water Quality Report

EMBARRAS AREA WATER DISTRICT

IL0290020

Annual Water Quality Report

For the period of January 1 to December 31, 2023

This report is intended to provide you with important information about your drinking water and the efforts made by the Embarras Area Water District water system to provide safe drinking water. The source of drinking water used by Embarras Area Water District is purchased from the Illinois American Water Company.

For more information regarding this report, or you would like to have a copy mailed to you contact:
Bruce Lee, General Manager at 217/348-3344 or email at eawdblee@consolidated.net

Este informe contiene informacion muy import ante sobre el agua que usted bebe. Traduzzcalo o hable conalguien que lo entienda bien.

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome attending any of our regularly scheduled meetings that are on the second Thursday of the month.

Source Water Information:

Source Water Name		Type of water	Report Status	Location
CCO2 – Meter Station	FF IL0195300	GW	Active	1500 N

The source of supply for Embarras Area Water District is Illinois American Water in the Champaign District groundwater. Currently 21 wells deliver water for treatment to two lime-softening plants: the Mattis Ave Plant, located in Champaign, and the Bradley Ave Plant, located West of Champaign. The wells are primarily located in the Mahomet Sands Aquifer and supplies both plants. The wells range from 208 to 366 feet in depth and are protected from surface contamination by geologic barriers in the aquifers. An aquifer is a porous underground formation (such as sand and gravel) that is saturated with water.

The Illinois Environmental Protection Agency (IEPA) has determined that Illinois American Water - Champaign wells are not susceptible to IOC, VOC, or SOC contamination. This determination is based on a number of criteria including monitoring conducted at the wells; monitoring conducted at the entry point to the distribution system; and the available hydrogeological data for the wells.

Source Water Assessment Information:

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 part 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 the office or call 217/348-3344.

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

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.

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 FDA Administration (FDA) 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.

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's Safe Drinking Water Hotline at (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.

Possible Contaminants present in drinking water:

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.

Radon:

Radon is a radioactive gas that you can't see, taste or smell. It has been linked to lung cancer. It is found throughout the U.S. and can move up through the ground and into a home through cracks and holes in a foundation. Radon can build up to high levels in all types of homes, and it can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will, in most cases, be a small source of radon in indoor air. Illinois American Water has monitored for radon for years. The Lincoln wells and finished water were sampled for radon in 2007. Finished water levels ranged from 140 – 194 pCi/L, with an average of 167 pCi/L. The USEPA is proposing limits on radon in drinking water depending on other steps that are used to reduce radon from other indoor sources. For information on radon in indoor air, call your local health department or the National Radon Hotline at 800-SOS-RADON.

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.

2023 Water Quality Information:

For your information, we have compiled a table showing what substances were detected in your drinking water during 2023. Not all 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 the water.

Definition of Terms:

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

Action level (AL): The concentration of a contaminant, which, 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 UEPA.

Avg: Regulatory compliance with some MCLs is 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.**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.

N: None.

mrem: millirems per year (a measure of radiation absorbed by the body)

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.

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

Embarras Area Water District Water Quality Test Results:

Lead And Copper	Date Sampled	MCLG	Action Level	90th Percentile	# Sites over Action Level	Units	Violation	Likely Source of Contaminant
Copper	2022	1.3	1.3	0.076	0	ppm	N.	Erosion of natural deposits; Leaching from wood preservatives; corrosion of household plumbing systems.
Lead	2022	0	15	0	0	Ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits

Regulated Contaminants Detected in 2023 (collected in 2023 unless noted)

Disinfectants &Disinfection By-products	Collection Date Detected	Highest Level Detected	Range of Levels Entry	MCLG	MCL	Units	Violation	Likely Source of Contaminants
Chlorine (ppm) (2)	2023	2.0	1.4-2	MRDLG = 4	MRDL=4	ppm	N	Water additive used to control microbes.
Total Haloacetic Acids (HAA5) (1)	2023	38	28.1-42.4	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (1)	2023	62	42.4-78.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection

[1]Trihalomethanes and Haloacetic Acids, also known as Disinfection By-Products (DBPs), are formed by the reaction of the chlorine disinfectant with naturally occurring organics found in the source water. Some people who drink water containing DBPs in excess of the MCL over many years may experience problems with their livers, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

[2]Chlorine is a disinfecting agent added to control microbes that otherwise could cause waterborne diseases. Most water systems in Illinois are required by law to add either chlorine or chloramines. Levels well in excess of the MCL could cause irritation of the eyes or nose in some people.

SPECIAL NOTICE FOR AVAILABILITY OF UNREGULATED CONTAMINANT MONITORING DATA:

IMPORTANT INFORMAION ABOUT YOUR DRINKING WATER

Availability of Monitoring Data for Unregulated Contaminants for Embarras Area Water District State Water System ID# IL0290020

Our system has sampled a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that this data is available. If you are interested in examining the results, please contact Bruce Lee at 217/348-3344 for more information.

This notice is being sent to you by Embarras Area Water District. State Water System ID# 0290020 distributed May 28th, 2024.

Summary: We are happy to announce that Embarras Area Water District had No monitoring, reporting, treatment technique, maximum disinfectant level or maximum contaminant level violations that were recorded in 2023.

2023 Water Quality Information – Illinois American Champaign:

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 2023.

Illinois American Water conducts extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables. While most monitoring was conducted in 2023, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting the tables below, see previous page "Definition of Terms".

HOW TO READ THIS TABLE:

- Starting with **Substance (with units)** read across.
- **Year Sampled** is usually in 2023 but may be a prior year.
- A **Yes** under **Compliance Achieved** means the amount of the substance met government requirements**.**
- **MCLG/MRDLG** is the goal level for that substance (this may be lower than what is allowed).
- **MCL/MRDL/TT/ACTION Level** shows the highest level of substance(contaminant) allowed.
- **Highest, Lowest or Average Compliance Result** represents the measured amount detected.
- **Range** tells the highest and lowest amounts measured.
- **Typical Source** tells where the substance usually originates.

Some unregulated substances are measured, but maximum contaminant levels have not been established by the government.

INORGANIC CONTAMINANTS

Inorganic contaminants	Collection Date	Highest level Detected	Range of levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	01/12/2021	1	0 - 1	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Fluoride	01/12/2021	0.6	0.57 - 0.6	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Sodium	01/12/2021	45.1	40.1 - 45.1			ppm	N	Erosion from naturally occuring deposits. Used in water softener regeneration.

RADIOACTIVE CONTAMINANTS

Radioactive contaminants	Collection Date	Highest level Detected	Range of levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	02/20/2018	1.512	1.512 - 1.512	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	02/20/2018	1.24	1.24 - 1.24	0	15	pCi/L	N	Erosion of natural deposits.

UNREGULATED CONTAMINANT MONITORING RULE

Our system has sampled a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that this data is available. If you are interested in examining the results, please contact Markesha Davis at 21-377-4764 or Markesha.Davis@amwater.com. This notice is being sent to you by Illinois American Water. State Water System ID # IL0195300 Date Distributed: May 2024

Unregulated Contaminants-2023 results

Parameter	Units	Year	Average result	Range Detected	Typical Source
Lithium	ppb	2023	11.4	9.10 to 13.7	Naturally occurring metal that may concentrate in brine water; lithium salts are used As pharmaceuticals, used in electrochemical cells, batteries, and organic syntheses.