CITY OF EAST DUBUQUE
2024 WATER QUALITY REPORT

INTRODUCTION:
The East Dubuque Water Department, in compliance with the Federal Safe Drinking Water Act, is providing its customers with the annual Water Quality Report. This report summarizes the quality of water that we provided last year, where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. If you have any questions about this report or concerning your water system, please contact the Michael Busch at City of East Dubuque at phone #815-747-3232. 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 council meetings that are held the first and third Monday of each month at 6:00 p.m.

WHERE DOES MY WATER COME FROM?
Our city uses ground water provided by three wells. Well #1 is a deep drilled well approximately 1200 feet into a limestone aquifer and is located on Montgomery Avenue behind the Police Station. Wells #2 and #3 are drilled approximately 125 feet into an unnamed aquifer and are considered shallow gravel packed wells. An aquifer is a geological formation that contains water. Well #2 is located near the intersection of Second Street and Menominee Avenue. Well #3 is located at Sixth Street and DeSoto Avenue. Approximately 35% of the City's water is pumped from Well #2, 35% from Well #1, and 30% from Well #3. Prior to pumping water into the system the city adds chlorine at the minimum required limits as a disinfectant to protect citizens from microbial contaminants, and fluoride is added to aid in dental hygiene, by state mandate, and polyphosphate is added to limit discoloration from iron and manganese, and to aid with hydrant flushing twice yearly to maintain cleanliness of mains and eliminate tibergulation. The public water system consists of an estimated 20 miles of water main, 131 fire hydrants, 180 water main valves, 900 metered customers, and we produced 58,260,900 gallons of water in 2024.

DOES EAST DUBUQUE WATER MEET THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA) STANDARDS?
YES!! Our water meets all USEPA standards. In 2024, we conducted over 860 tests to insure compliance with drinking water standards. To ensure that tap water is safe to drink, the USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which also must provide protection for public health. The State of Illinois and the USEPA require us to test our water on a regular basis for over 80 contaminants to ensure its safety. All tests have been submitted as required. There were no detects exceeding USEPA guidelines for the entire year. A summary of testing is included in this report.

DO CITIZENS NEED TO TAKE SPECIAL PRECAUTIONS?
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. The USEPA/Center for Disease Control 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 at **1-800-426-4791.**

WHY ARE THERE CONTAMINANTS IN MY WATER?
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 the 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 **1-800-426-4791.**

HOW COULD CONTAMINANTS GET INTO MY 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. Possible contaminants consists of:

- ***Microbial contaminants,*** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agriculture live stock 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, 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 gas production and mining activities.

THE ILLINOIS EPA SOURCE WATER VULNERABILITY ASSESSMENT RESULTS:
Information provided by this assessment indicates the city's water supply is vulnerable to contaminants from synthetic organic chemicals and volatile organic chemicals. Although the city has had no violations of these chemicals when testing was conducted, the city was unable to receive a waiver or exemption from testing due to the shallow gravel packed wells. This assessment can be obtained by calling the City of East Dubuque at phone # 815-747-3416.

2024 Water Quality Data

-Definition of Terms-

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 (f 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 Goal (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 setup.*
Maximum Contaminant Level (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 Residual Disinfectant Level (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 contaminates.*
Maximum Residual Disinfectant Level Goal (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 contaminates.*
Level Found: *This column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.*
Range of Detections: *This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.*
Date of Sample: *If a data appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the CCR calendar year.*
Action Level (AL): *The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.*
Treatment Technique (TT): *A required process intended to reduce the level of a contaminant in drinking water.*
nd: ***Not detectable at testing limits***
n/a: *Not applicable*
ppm: *Parts per million or milligrams per liter*
ppb: *Parts per billion or micrograms per liter*
pCi/L: *Picocuries per liter, used to measure radioactivity.*
MREM: *Millirems per year (a measure of radiation absorbed by the body)*
hg/L – Parts per Trillion or Nanograms per liter

Detected Contaminants

Contaminant (unit of measurement) *Typical Source of Contaminant*	*MCLG*	*MCL*	*Level found*	*Range of detections*	*Violation*	*Date of Sample*
Radioactive Contaminants						
COMBINED RADIUM (pCi/L) 226/228 Erosion of natural deposits.	0	5	4.0	0 – 4.06	No	07/31/2024
COMBINED URANIUM (pCi/L) Erosion of natural deposits.	0	30	0.7748	0.7748 - 0.7748	No	04/09/2007
GROSS ALPHA Excluding radon and uranium **(pCi/L)** Erosion of natural deposits.	0	15	6	1.44-5.56	No	07/31/2024

Contaminant (unit of measurement) *Typical Source of Contaminant*	*MCLG*	*MCL*	*Level found*	*Range of detections*	*Violation*	*Date of Sample*
PFAS: Pre and Polyfluoroalkyl Substances						
Perfluorobutane Sulfonic Acid PFBS (ng/L)	140,000	2.0	3.0		No	05/06/2021
Perfluorooctane Sulfonic Acid PFOS (ng/L)	14	2	3.6		No	05/06/2021
Perfluoroheyanoic Acid PFHxA (ng/L)	N/A	2	< 2		No	05/06/2021

- For more information about PFAS health advisories https://www2.illinois.gov/epa/topics/water-quality/pfas/pages/pfas-healthadvisory.aspx

Synthetic Organic Contaminants

Including Pesticides and Herbicides
Likely Source of Contamination

Di (2-ethylhexyl) phthalate Discharge from rubber and chemical factories.	0	6	N/D	0 - 0	No	02/14/2024

Inorganic Contaminants

ARSENIC (ppb) Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.	0	10	N/D	0 – 0	No	07/31/2024
BARIUM (ppm) Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.	2	2	0.1	0.0836-0.1	No	08/19/2024
COPPER (ppm) Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.	1.3 (90^{th} percentile = 0.953 ppm)	AL=1.3	0.953	0.0 – 2.02 1 exceeding AL	No	08/07/2024
FLUORIDE (ppm) Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.	4	4	0.8	0.11-0.77	No	11/12/2024
HARDNES (ppm) Erosion of natural deposits.			643	542-643		07/31/2024
LEAD (ppb) Corrosion of household plumbing systems; Erosion of natural deposits.	0 (90^{th} percentile = N/D ppb)	AL=15	N/D	0.0 – 0.0 0 exceeding AL	No	08/07/2024

Both the system's lead tap sampling data and our Community Water Supply service line material inventory can be obtained by contacting The City of East Dubuque.

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. East Dubuque water department is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water, you may wish to have your water tested, contact the City of East Dubuque at 815-747-3416. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.

NITRATE (AS NITROGEN) (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	4.24	0.0 – 4.24	No	05/10/2024

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. High levels of nitrate in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rain fall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

NITRATE & NITRITE (ppm) Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	10	10	4.24	0.0 – 4.24	No	05/10/2024
SELENIUM (ppb) Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.	50	50	N/D	0 - 0	No	07/31/2024

Disinfectants/Disinfection By-Product

CHLORINE (ppm) Water additive to control micorbes	MRDLG=4	MRDL=4	0.9	0.56 – 1.14	No	12/31/2024
TOTAL HALOACTIC ACIDS (HAA5) (ppb) By-product of water disinfection.	n/a	60	3	2.8 – 2.8	No	08/20/2024
TTHMs (ppb) (Total TRihalomethanes) By-product of water disinfection.	n/a	80	23	23 – 23	No	08/20/2024

Contaminant (unit of measurement) *Typical Source of Contaminant*	*MCLG*	*MCL*	*Level found*	*Range of detections*	*Violation*	*Date of Sample*

Unregulated Contaminants

BROMODICHLOROMETHANE (ppb) By-product of drinking water chlorination.	1	1	8.7	8.7 – 8.7	No	08/09/2023
BROMOFORM (ppb) Discharge from manufacturing plants; Used to dissolve dirt and grease.	1	1	3.4	3.4-3.4	No	08/09/2023
CHLOROFORM (ppb) Used as a solvent for fats, oils, rubber, resins; A cleansing agent; Found in fire extinguishers.	1	1	6.0	6.0-6.0	No	08/09/2023
DIBROMOCHLOROMETHANE (ppb) Used as a chemical reagent; An intermediate in organic synthesis.	1	1	N/D	0.0 – 0.0	No	10/03/2023
SULFATE (ppm) Erosion of naturally occurring deposits.	n/a	n/a	59.8	46.9-59.8	No	07/31/2024

State Regulated Contaminants

IRON (ppm) Erosion from naturally occurring deposits.	n/a	1.0	N/D	0.0 – 0.0	No	07/31/2024
MANGANESE (ppb) Erosion of naturally occurring deposits.	150	150	N/D	0.0 – 0.0	No	07/31/2024
SODIUM (ppm) Erosion of naturally occurring deposits; Used as water softener.	n/a	n/a	167	98.7-167	No	07/31/2024

Unit of Measurement

ppm – Parts per million, or milligrams per liter
ppb – Parts per billion, or micrograms per liter

Water Quality Data Table Footnotes

UNREGULATED CONTAMINANTS:
A maximum contaminant level (MCL) for this contaminant has not been established by either state or federal regulations, nor has mandatory health effects language. The purpose for monitoring this contaminant is to assist USEPA in determining the occurrence of unregulated contaminants in drinking water, and whether future regulation is warranted.

IRON
This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

MANGANESE
This contaminant is not currently regulated by USEPA. However, the state has set an MCL for this contaminant for supplies serving a population of 1000 or more.

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 you are on a sodium-restricted diet, you should consult a physician about this level of sodium in the water.

2024 Non-regulated Contaminant Detections

The following table identifies contaminants detected within the past five years. State and federal regulations do not require monitoring for these contaminants and no maximum contaminant level (MCL) has been established. These detections are for informational purposes only. No mandated health effects language exists. The CCR Rule does not require that this information be reported; however, it may be useful when evaluating possible sources of contamination or characterizing overall water quality.

-Definition of Terms-

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Range of Detections: *This column represents a range of individual sample results, from lowest to highest that were collected during the CCR calendar year.*
Date of Sample: *If a data appears in this column, the Illinois EPA requires monitoring for this contaminant less than once per year because the concentrations do not frequently change. If no date appears in the column, monitoring for this contaminant was conducted during the CCR calendar year.*

Contaminant (unit of measurement) *Typical Source of Contaminant*	*MCLG*	*MCL*	*Level found*	*Range of detections*	*Date of Sample*
Additional Contaminants					
BORON (ppb) Erosion of naturally occurring deposits; Used in detergents and as a water softener; Used in production of glass, cosmetics, pesticides, fire retardants, and for leather tanning.			57.5	29.9 – 57.5	09/08/2015
DIBROMOACETIC ACID (HHA) (ppb) By-product of drinking water chlorination.			1.6	1.6 – 1.6	08/20/2024

Unit of measurement *– Definition*
ppb – Parts per billion, or micrograms per liter

The City of East Dubuque has available upon request this year's Consumer Confidence Report (CCR). The CCR includes basic information on the source(s) of your drinking water, the levels of any contaminants that were detected in the water during 2021, and compliance with other drinking water rules, as well as some educational materials. To obtain a free copy of the report, please call City Hall at 815 747-3416 or you may pick one up at City Hall.

Monitoring Violations Annual Notice

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for City of East Dubuque

The City of East Dubuque Water Department was notified of a violation related to your drinking water. While this is not an emergency, as our customers and a resident of our city, you have a right to know what happened and the steps that have been taken to remedy the situation.

The water department is required to monitor the drinking water on a regular basis to check for specific contaminants and are an indicator of whether your drinking water meets health standards. During the timeframe of January 1, 2022, to December 31, 2024, one testing sample bottle was not received by the testing lab because it was lost in the mail. As a result, the City of East Dubuque did not meet the monitoring and testing requirements for Lead and Copper. This is not due to contaminants in the water, rather an error in the mail system.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminants of which the issue occurred. This table also shows how frequently Lead and Copper should be tested, how many samples are required to be taken, how many samples were taken, 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 Samples Should have been Taken	When Samples Were Taken and Future Sample Timeframe
Lead and Copper	10 samples every 3 years	10 – one of which was not delivered to the Lab	June 01 – Sept 30, 2024	When: Resampled October 7th, 2024 – No Containment were Detected (*was not accepted, outside sample window) Future Samples: 1/01/2025 – 06/30/25

What happened? What is being done?

One sample was lost in the mail and not received at the lab within the required sampling window. A replacement sample outside of the specified sampling period was submitted and not accepted by EPA. As a result, The City of East Dubuque was issued a Non Compliance Advisory and a Monitoring Violation for Lead and Copper sampling. Due to the Lead and Copper Monitoring Violation, we will be switched to a six-month Lead and Copper monitoring schedule. This requires 20 samples every 6 months until we are allowed back on the tri-annual monitoring schedule.

Since this incident we have been tracking all mailed samples verifying that our samples arrive at the lab.

For more information, please contact Michael Busch at 815-747-3416 or 261 Sinsinawa Ave, East Dubuque, IL 61025

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 East Dubuque. Water System ID# IL0850100 Date distributed 04/15/2025