ANNUAL WATER QUALITY REPORT



We are pleased to present to you the Annual Water Quality Report (Consumer Confidence Report) for the year, 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 water utility to provide safe drinking water.
(Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien).

East Chicago Water Department
219-391-8469



Mayor Anthony Copeland

EAST CHICAGO WATER WORKS

IN5245012

ANNUAL CONSUMER CONFIDENCE REPORT

JANUARY 1 TO DECEMBER 31, 2023

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SOURCES OF DRINKING WATER

EAST CHICAGO WATER WORKS is Surface water.

Our water source(s) and source water assessment information are listed below:

Source Name		Type of Water	Report Status	Location
LAKE MICHIGAN	LAKE	Surface 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. 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 EPAs Safe Drinking Water Hotline at (800) 426-4791.
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.

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. Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office. Immune-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).

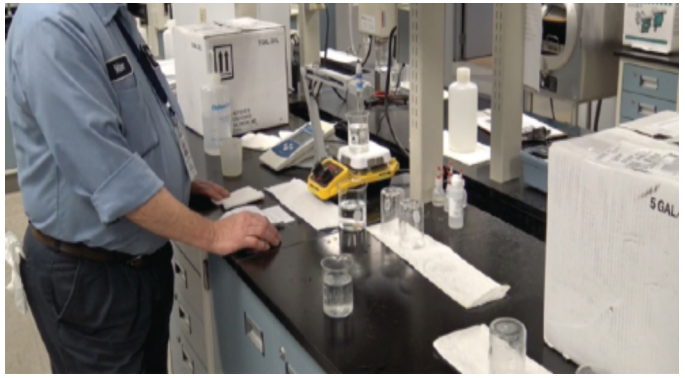
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but 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 or at http://www.epa.gov/safewater/lead.

In the tables below, you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms, we've provided the following definitions:

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
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 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.
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.
Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.
Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Avg: Average - Regulatory compliance with some MCLs are based on running annual average of monthly samples.
LRAA: Locational Running Annual Average
mrem: millirems per year (a measure of radiation absorbed by the body)
ppb: micrograms per liter (ug/L) or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm: milligrams per liter (mg/L) or parts per million - or one ounce in 7,350 gallons of water
picocuries per liter (pCi/L): picocuries per liter is a measure of the radioactivity in water.
na: not applicable.

Our water system tested a minimum of 30 samples per month in accordance with the Total Coliform Rule for microbiological contaminants.
With the microbiological samples collected, the water system collects disinfectant residuals to ensure control of microbial growth.



Disinfectant	Date	HighestRAA	Unit	Range	MRDL	MRDLG	Typical Source
CHLORINE	2023	1	ppm	0.25 - 1.65	4	4	Water additive used to control microbes

REGULATED CONTAMINANTS

In the tables below, we have shown the regulated contaminants that were detected. Chemical Sampling of our drinking water may not be required on an annual basis; therefore, information provided in this table refers back to the latest year of chemical sampling results.

Lead and Copper	Period	90TH Percentile: 90% of your water utility levels were less than	Range of Sampled Results (low - high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2020 - 2021	0.085	0.0015 - 0.12	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2018 - 2021	4.24	1.14 - 55	ppb	15	2	Corrosion of household plumbing systems; Erosion of natural deposits
LEAD	2020 - 2021	13	0	ppb	15	3	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection By Products	Sample Point	Period	Highest LRAA	Range	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	1202 W 148TH ST	2023	14	9.7 - 18.9	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	1203 W 151ST ST (FIRE STATION)	2022 - 2023	12	9.3 - 12.1	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	400 E CHICAGO AVE	2022 - 2023	14	11.8 - 15.1	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	777 ALDIS AVE	2023	10	6.8 - 11.4	ppb	60	0	By-product of drinking water disinfection
TTHM	1202 W 148TH ST	2023	33	24.2 - 40.29	ppb	80	0	By-product of drinking water chlorination
TTHM	1203 W 151ST ST (FIRE STATION)	2022 - 2023	43	25.99 - 53.78	ppb	80	0	By-product of drinking water chlorination
TTHM	400 E CHICAGO AVE	2022 - 2023	36	24.1 - 46.42	ppb	80	0	By-product of drinking water chlorination
TTHM	777 ALDIS AVE	2023	30	20.6 - 39.04	ppb	80	0	By-product of drinking water chlorination

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
BARIUM	6/8/2023	0.02	0.02	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
DIBROMOCHLOROMETHANE	10/1/2023	0.0077	0.0046 - 0.0077	MG/L	0.1	0	
FLUORIDE	6/8/2023	0.11	0.11	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	6/8/2023	0.24	0.24	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	6/8/2023	0.24	0.24	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Radiological Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (-226 & -228)	6/27/2018	0.2	0.2	pCi/L	5	0	Erosion of natural deposits
GROSS ALPHA, EXCL. RADON & U	6/27/2018	0.8	0.8	pCi/L	15	0	Erosion of natural deposits
RADIUM-226	6/27/2018	0.31	0.31	PCI/L	5	0	

TURBIDITY

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

Percentage of samples in compliance with Std	Months Occurred	Violation	Highest Single Measurement	Month Occurred	Sources	Level Indicator
100.00	11	NO	0.13	March	TREATMENT PLANT #2 - NEW PLANT	Yes

TOTAL ORGANIC CARBON

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

TOC	Collection Date	Highest Value	Range	Unit	TT	Typical Source
CARBON, TOTAL	10/9/2023	2.08	1.57 - 2.08	MG/L	100000	Naturally present in the environment

VIOLATIONS

During the period covered by this report we had the below noted violations.

Violation Period	Analyte	Violation Type	Violation Explanation
12/31/2022 - 3/30/2023	TTHM	MONITORING, ROUTINE (DBP), MAJOR	Failed to monitor/report as required for chlorine or disinfection by-products
12/31/2022 - 3/30/2023	TOTAL HALOACETIC ACIDS (HAA5)	MONITORING, ROUTINE (DBP), MAJOR	Failed to monitor/report as required for chlorine or disinfection by-products

Additional Required Health Effects Language:

Infants and children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4761). There are no additional required health effects violation notices.

DEFICIENCIES

Unresolved significant deficiencies that were identified during a survey done on the water system are shown below.

Date Identified	Facility	Code	Activity	Due Date	Description
11/15/2023	DISTRIBUTION SYSTEM	DS08	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Cross connection control devices are not properly installed, tested, or inspection
11/15/2023	DISTRIBUTION SYSTEM	DS10	SANITARY SURVEY LETTER RESPONSE	1/12/2024	System has greater than 25% water loss
11/15/2023	DISTRIBUTION SYSTEM	DS10	SANITARY SURVEY CORRECTIVE ACTION/ PLAN	5/10/2024	System has greater than 25% water loss
11/15/2023	PUMPING FACILITY - FINISHED WATER #1	PU04	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Pumps and facilities are not properly maintained
11/15/2023	PUMPING FACILITY - FINISHED WATER #1	PU04	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Pumps and facilities are not properly maintained
11/15/2023	PUMPING FACILITY - RAW WATER #1	PU06	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Back up power is not operable or maintained
11/15/2023	TREATMENT PLANT	TR02	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Chemical feeders and/or pumps are not operable, maintained, and/or calibrated
11/15/2023	TREATMENT PLANT	TR07	SANITARY SURVEY LETTER RESPONSE	1/12/2024	No provisions to warn operators of treatment failures
11/15/2023	TREATMENT PLANT	TR08	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Back-up power not operable and/or maintained
11/15/2023	TREATMENT PLANT	TR17	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Critical spare parts are not on hand
11/15/2023	TREATMENT PLANT	TR22	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Treatment insufficient to meet all of the NPDWS
11/15/2023	TREATMENT PLANT	TR26	SANITARY SURVEY LETTER RESPONSE	1/12/2024	System does not have proper filter inspection records
11/15/2023	TREATMENT PLANT	TR28	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Turbidity effluent is not satisfactory
11/15/2023	TREATMENT PLANT	TR29	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Monthly backwash reports are not are sent in
11/15/2023	TREATMENT PLANT	TR30	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Backwash water is recycled greater than 10%
11/15/2023	TREATMENT PLANT #2 - NEW PLANT	TR09	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Access is not restricted to the treatment plant
11/15/2023	TREATMENT PLANT #2 - NEW PLANT	TR29	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Monthly backwash reports are not are sent in
11/15/2023	TREATMENT PLANT #2 - NEW PLANT	TR30	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Backwash water is recycled greater than 10%
11/15/2023	WATER SYSTEM	FW05	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Reservoirs are not structurally sound
11/15/2023	WATER SYSTEM	FW06	SANITARY SURVEY LETTER RESPONSE	1/12/2024	System does not have a storage maintenance schedule in place and records kept
11/15/2023	WATER SYSTEM	OC02	SANITARY SURVEY LETTER RESPONSE	1/12/2024	System does not have sufficient personnel
11/15/2023	WATER SYSTEM	SM01	SANITARY SURVEY LETTER RESPONSE	1/12/2024	ERP not available or up to date
11/15/2023	WATER SYSTEM	SM04	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Sufficient operation and maintenance records are not being kept
11/15/2023	WATER SYSTEM	SM06	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Routine maintenance schedules are not established or adhered to
11/15/2023	WATER SYSTEM	SM10	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Turbidity monitors are not properly calibrated or verified
11/15/2023	WATER SYSTEM	SM12	SANITARY SURVEY LETTER RESPONSE	1/12/2024	Labeling, painting , and directional flow is not adequate at the plant