

2023 ANNUAL WATER QUALITY REPORT

EDWARDSVILLE WATER AUTHORITY 545 MAPLEWOOD BLVD. GEORGETOWN, IN 47112 812-948-0900

IN5222001

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) for January 1 – December 31, 2023. It provides details about where your water comes from, what it contains, and how it compares to the standards set by regulatory agencies. We routinely monitor for constituents mandated by the EPA (Environmental Protection Agency) and IDEM (Indiana Department of Environmental Management). Our goal is to provide you with a safe and dependable supply of drinking water.

Contact Information:

If you have any questions about this report, please contact Mr. Dwayne Clark at 812-948-0900. If you want to learn more about your water utility, you may stop by the water office located at 545 Maplewood Blvd. Georgetown, IN on Monday – Friday between the hours of 8:00 am – 4:30 pm.

Where does your water come from?

Your drinking water comes from two different sources. One water source is from wells located in a sand and gravel aquifer adjacent to the Ohio River. Additionally, we purchase water from Indiana-American Water Company, which has wells located in Clark County.

Why are there contaminants in your 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. 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.

<u>Inorganic Contaminants</u>: 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.

<u>Organic Chemical Contaminants</u>: 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 that 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 must provide the same protection for public health.

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.

Do you 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 or the Safe Drinking Water Hotline.

Additional health effects you should know about:

Copper is an essential nutrient, but some people who drink water containing Copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing Copper in excess of the action level over many years can suffer liver or kidney damage.

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 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.

Important information for the Spanish-speaking population: (Espanol)

Este informe contiene informacion muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuniquese con alguien que pueda traducir la informacion.

EDWARDSVILLE WATER COMPANY TEST RESULTS – IN5222001

Regulated Contaminants:

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG or MRDLG (Chlorine)	MCL or MRDL (Chlorine)	Units	Violation? Y / N	Likely Source of Contamination
Haloacetic Acids (HAA5)	2022-2023	5.38	2-5.38	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022-2023	11-23	11-23	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Chlorine	2023	1	0.62-2.2	MRDLG=4	MRDL=4	ppm	N	Water additive used to control microbes.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation? Y/N	Likely Source of Contamination
Barium	2023	0.0304	0.0304	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2023	0.654	0.654	4	4.0	ppm	N	Erosion of natural deposits; Water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen)	2023	1.29	1.29	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Thallium	2023	< 0.0002	< 0.0002	0.5	2	ppb	N	Discharge from electronics, glass and leaching from ore-processing sites; drug factories.

Volatile Organic	Collection Date	Highest Level	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
Contaminants		Detected	Detected					
Cis-1,2-	2023	0.52	0.52	70	70	ppb	N	Discharge from industrial chemical factories.
Dichloroethylene								

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation? Y/N	Likely Source of Contamination
Combined Radium (226 & 228)	2023	1.36	1.36	0	5	pCi/L	N	Erosion of natural deposits.
Gross Alpha (including Radon and Uranium)	2023	1.28	1.28	0	5	pCi/L	N	Decay of natural and man-made deposits.
Gross Beta Particle Activity	2023	2.92	2.92	0	0	pCi/L	N	Decay of natural and man-made deposits. Note: The gross beta particle activity MCL is 4 millirems/year annual dose equivalent to the total body or any internal organ. 50 pCi/L is used as a screening level.
Radium-226	2023	1.36	1.36	0	5	pCi/L	N	Erosion of natural deposits.

^{*}The MCL for Beta/photon emitters is written as 4 mrem/year. EPA considers 50 pCi/L as the level of concern for beta emitters.

Lead and Copper*	Collection	MCLG	Action Level	90 th	# Sites	Units	Violation?	Likely Source of Contamination
	Date		(AL)	Percentile	over AL		Y/N	
Copper	2019-2022	1.3	1.3	0.814	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2019-2022	0	15	1.52	0	ppb	N	Erosion of natural deposits; Corrosion of household plumbing systems.

^{*30} Sites were sampled for Lead and Copper.

Coliform Bacteria						
Maximum Contaminant	Total Coliform	Highest No.	Fecal Coliform or E. Coli	Total No. of Positive E.	Violation	Likely Source of Contamination
Level Goal	Maximum	of Positive	Maximum Contaminant	Coli or Fecal Coliform		-
	Contaminant Level		Level	Samples		
0	0 positive monthly	0		0	N	Naturally present in the environment.
	samples.					

Unregulated Compounds	Collection Date	Highest Level Detected	Range Low - High	U.S. EPA Final MCL	Typical Source
Perfluorooctanoic Acid (PFOA) ¹	2023	2.6 ppt	ND-2.6 ppt	4.0 ppt	Manufactured chemicals used in household goods for stain, grease, heat, and water resistance.
Perfluorooctane Sulfonic Acid (PFOS)	2023	ND	NA	4.0 ppt	Manufactured chemicals used in household goods for stain, grease, heat, and water resistance.
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) (GEN X Chemicals)	2023	ND	NA	10 ppt	Manufactured chemicals used in household goods for stain, grease, heat, and water resistance.
Perfluorohexane Sulfonic Acid (PFHxS)	2023	ND	NA	10 ppt	Manufactured chemicals used in household goods for stain, grease, heat, and water resistance.
Perfluorononanoic Acid (PFNA)	2023	ND	NA	10 ppt	Manufactured chemicals used in household goods for stain, grease, heat, and water resistance.
Combined: Herfluorobutanesulfonic Acid (PFBS), (PFNA), (PFHxS), [(HFPO-DA) (GEN X Chemicals)]	2023	ND	NA	1.0 Hazard Index (No Unit)	Manufactured chemicals used in household goods for stain, grease, heat, and water resistance.

INDIANA-AMERICAN WATER COMPANY TEST RESULTS – IN5210005

Regulated Contaminants:

Disinfectants and Disinfection By- Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG or MRDLG (Chlorine)	MCL or MRDL (Chlorine)	Units	Violation? Y / N	Likely Source of Contamination
Haloacetic Acids (HAA5)	2023	16.7	14.5-16.7	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	36.2	34.4-36.2	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Chlorine	2023	1.82	0.55-1.82	MRDLG=4	MRDL=4	ppm	N	Water Additive used to control microbes.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation? Y/N	Likely Source of Contamination
Fluoride	2021	0.77	0.77	4	4.0	ppm	N	Erosion of natural deposits; Water additive that promotes strong
								teeth; discharge from fertilizer and aluminum factories.
Nitrate (measured as	2023	0.14	0.14	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage;
Nitrogen)								Erosion of natural deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation? Y/N	Likely Source of Contamination
Beta/photon emitters*	2017	0.3	0.3-0.3	0	4	mrem/yr	N	Decay of natural and man-made deposits.
Uranium	2017	0.3065	0.3065-0.3065	0	30	ua/l	N	Erosion of natural deposits.

^{*}The MCL for Beta/photon emitters is written as 4 mrem/year. EPA considers 50 pCi/L as the level of concern for beta emitters.

Lead and Copper*	Collection	MCLG	Action Level	90 th	# Sites	Units	Violation?	Likely Source of Contamination
	Date		(AL)	Percentile	over AL		Y/N	
Copper	2021	1.3	1.3	0.622	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2021	0	15	ND	0	ppb	N	Erosion of natural deposits; Corrosion of household plumbing systems.

^{*30} Sites were sampled for Lead and Copper

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	No more than 5% of monthly samples can	0	0	0	N	Naturally present in the environment.
	be positive per month.					

Other Regulated Substances:

Unregulated Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation? Y/N	Likely Source of Contamination
Sulfate	2021	39.7	39.7	NA	NA	ppm	N	Erosion of natural deposits.

Other Substances of Interest:

Unregulated Contaminants	Collection Date	Highest Level	Range of Levels	MCLG	MCL	Units	Violation? Y/N	Likely Source of Contamination
Sodium	2021	Detected 18.3	Detected 18.3	NA	NA	ppm	N	Naturally occurring.
Hardness	2023	184	154-208	NA	NA	ppm	N	Naturally occurring.

Unregulated Compounds:

Unregulated Contaminants	Collection Date	Average Amount Detected	Range Low - High	Proposed U.S. EPA MCL	Hazard Index Calculation	Typical Source
Perfluorooctanoic Acid (PFOA) ¹	2023	2.1	ND to 2.1	4.0 ppt	NA	Manufactured chemicals used in household goods for stain, grease, heat, and water resistance.
Perfluorooctane Sulfonic Acid (PFOS)	2023	ND	NA	4.0 ppt	NA	Manufactured chemicals used in household goods for stain, grease, heat, and water resistance.
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA) (GEN X Chemicals)	2023	ND	NA	1.0 Hazard Index (No Unit)	NA	Manufactured chemicals used in household goods for stain, grease, heat, and water resistance.
Herfluorobutanesulfonic Acid (PFBS)	2023	ND	NA	1.0 Hazard Index (No Unit)	NA	Manufactured chemicals used in household goods for stain, grease, heat, and water resistance.
Perfluorohexane Sulfonic Acid (PFHxS)	2023	ND	NA	1.0 Hazard Index (No Unit)	NA	Manufactured chemicals used in household goods for stain, grease, heat, and water resistance.

Ī	Perfluorononanoic Acid	2023	ND	NA	1.0	NA	Manufactured chemicals used in household goods for stain, grease,
	(PFNA)				Hazard		heat, and water resistance.
					Index (No		
					Unit)		

Important Drinking Water Definitions:

In the above table, you will find many terms and abbreviations that you may not be familiar with. To help you better understand these terms, we've provided the following definitions:

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow.

AVG (Average): Regulatory compliance with some MCLs are based on running annual averages of monthly or quarterly samples.

Hazard Index (No Unit): = (Gen X Water/10 ppt) + (PFBS Water/2000 ppt) + (PFNA Water/10 ppt) + (PFHxS Water/10 ppt).

MCL (Maximum Contaminant Level): The "Maximum Allowed" (MCL) is 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 a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfection Level Goal): 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.

NA (Not Applicable): Does not apply to this water system.

ND (Not detected): Laboratory analysis determined the constituent was not present at detection limits.

PPM (Part Per Million or Milligram per liter (mg/l)): One part per million equates to one minute in two years, or a single penny in \$10,000.

PPB (Part Per Billion or microgram per liter (ug/l)): One part per billion equates to one minute in 2,000 years, or a single penny in \$10,000,000.

PPT (Part Per Trillion or Nanogram per liter (ng/l)): One part per trillion equates to one minute in 1.9 million years, or a single penny in \$1,000,000,000.

How can you get involved?

Your involvement starts with the environment around you. Surface water and groundwater are continually being impacted by your actions. The most effective way to prevent groundwater contamination is through education about potential contamination sources and how to minimize or eliminate them completely.

Water Information Resources:

IDEM (Indiana Department of Environmental Management) – www.in.gov/idem

EPA (Environmental Protection Agency) – www.epa.gov/safewater

CDC (Center for Disease Control) - www.cdc.gov

Safe Drinking Water Hotline – 800-426-4791