# **Annual Drinking Water Quality Report**

#### FERDINAND WATER DEPARTMENT

Public Water System ID: IN5219004

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, 2024. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. (Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien).

For more information regarding this report, contact:

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Phone: (812) 367-2280 Extension 7

#### Sources of Drinking Water

FERDINAND WATER DEPARTMENT is Purchased surface water.

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

Source Name		Type of Water	Report Status	Location
PATOKA LAKE REGIONAL - IN5219012	WEST OF 162	Surface water		
PATOKA LAKE REGIONAL- IN5219012	CONVENT	Surface water		

The Ferdinand Water Department provides water for 1160 meters and fire protection in the Town of Ferdinand. All of the water for our system is purchased from Patoka Lake Regional Water & Sewer District located at 2647 North State Road 545 in Dubois, Indiana. Patoka provides us with a high quality of water that meets or exceeds the testing and reporting requirements of the National Primary Drinking Water Regulations (NPDWR), Environmental Protection Agency (EPA), and Indiana Department of Environmental Management (IDEM).

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 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:

There is no safe level of lead in drinking water. Exposure to lead in drinking water can cause serious health effects in all age groups, especially pregnant people, infants (both formula-fed and breastfed), and young children. Some of the health effects to infants and children include decreases in IQ and attention span. Lead exposure can also result in new or worsened learning and behavior problems. The children of persons who are exposed to lead before

or during pregnancy may be at increased risk of these harmful health effects. Adults have increased risks of heart disease, high blood pressure, kidney or nervous system problems. Contact your health care provider for more information about your risks.

<u>Microbial Contaminants</u> - 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 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, urban stormwater 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 stormwater 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.

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. 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

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:

<u>Action Level (AL)</u>: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. <u>Action Level Goal (ALG)</u>: 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. <u>Level 1 Assessment</u>: 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.

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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.

2024 Monitoring Results for Ferdinand	Water Department
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Lead and	Date	MCLG	Action	90th	# Sites	Units	Violation	Likely Source of Contamination
Copper	Sampled		Level (AL)	Percentile	Over AL			
Copper	2024	1.3	1.3	0.31	1	ppm	Ν	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead	2024	0	15	9.6	1	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits

Disinfectants	Collection	Highest	Range of	MCLG	MCL	Units	Violation	Likely Source of
and Disinfection	Date	Level	Levels					Contamination
By-Products		Detected	Detected					
Chlorine	2024	2.2	0.35 – 2.2	MRDLG	MRDL	ppm	Ν	Water additive used to
				= 4	= 4			control microbes
Haloacetic Acids	2024	42.1	19.3 –	No goal	60	ppb	N	By-product of drinking
(HAA5)			42.1	for the				water disinfection
				total				
Total	2024	65.4	16.9 —	No goal	80	ppb	Ν	By-product of drinking
Trihalomethanes			65.4	for the				water disinfection
(TTHM)				total				

Our water system tested a minimum of 2 sample(s) 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	Highest RAA	Unit	Range	MRDL	MRDLG	Typical Source
CHLORINE	2024	0	ppm	0.1 - 2.2	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.

Jnregulated Contaminant Monitoring Rule (UCMR)	Collection Date of HV	Highest Value (HV)	Range of Sampled Result(s)	Unit	
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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	2023 - 2024	0.59	0.085 - 1.4	ppm	1.3	1	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2023 - 2024	9.6	0.68 - 150	ppb	15	1	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts	Sample Point	Period	Highest LRAA	Range	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	1910 N.V.D.	2023 - 2024	34.1	19.3 - 42.1	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	ΡΑΤΟΚΑ ΡΙΤ	2023 - 2024	33.1	20.3 - 41	ppb	60	0	By-product of drinking water disinfection
TTHM	1910 N.V.D.	2023 - 2024	40.6	19 - 65.4	ppb	80	0	By-product of drinking water chlorination
ТТНМ	ΡΑΤΟΚΑ ΡΙΤ	2023 - 2024	35.5	16.9 - 58.2	ppb	80	0	By-product of drinking water chlorination

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ASBESTOS	3/10/2021	0.36	0.36	MFL	7	7	Decay of asbestos cement water mains; Erosion of natural deposits

## **Violations**

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

Violation Period	Analyte
	Analyte

Violation Type	Violation Explanation			

No violations during this period.

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
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No deficiencies during this period.

# **Reseller Contaminants**

Regulated Contaminants	Collection Date	Water System	Highest Sample Result	Range of Sampled Result(s) (low - high)	Unit	MCL	MCLG	Typical Source
ATRAZINE	8/5/2024	PATOKA LAKE REGIONAL WATER	0.21	0 - 0.21	ppb	3	3	Runoff from herbicide used on row crops
BARIUM	8/6/2024	PATOKA LAKE REGIONAL WATER	0.024	0.024	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	8/6/2024	PATOKA LAKE REGIONAL WATER	0.57	0.57	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories

Disinfection Byproducts	Monitoring Period	Water System	Highest LRAA	Range of Sampled Result(s) (Iow - high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2023 - 2024	PATOKA LAKE REGIONAL WATER	35	20.7 - 47.4	ppb	60	0	By-product of drinking water disinfection

TOTAL HALOACETIC ACIDS (HAA5)	2023 - 2024	PATOKA LAKE REGIONAL WATER	36	22.2 - 46.8	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	2023 - 2024	PATOKA LAKE REGIONAL WATER	39	19.6 - 57.8	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	2023 - 2024	PATOKA LAKE REGIONAL WATER	38	18.6 - 61	ppb	60	0	By-product of drinking water disinfection
TTHM	2023 - 2024	PATOKA LAKE REGIONAL WATER	39	19.4 - 61.3	ppb	80	0	By-product of drinking water chlorination
TTHM	2023 - 2024	PATOKA LAKE REGIONAL WATER	39	17.9 - 65.8	ppb	80	0	By-product of drinking water chlorination
TTHM	2023 - 2024	PATOKA LAKE REGIONAL WATER	42	20.6 - 68.8	ppb	80	0	By-product of drinking water chlorination
TTHM	2023 - 2024	PATOKA LAKE REGIONAL WATER	38	16.7 - 59.3	ppb	80	0	By-product of drinking water chlorination

Water System	Determination	Deficiency Description	Comments
Name	Date		

Additional Required Health Effects Language from Purchases:

Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

# **Reseller Violations and Health Effects Information**

During the 2024 calendar year, the water system(s) that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Туре	Category	Analyte	Compliance Period

There are no additional required health effects violation notices from Purchases.