

ORLEANS WATER WORKS
Public Water Supply ID: IN5259003

Consumer Confidence Report

2024 CCR

ORLEANS WATER WORKS
Public Water System ID: IN5259003

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:

Name: Robert F. Henderson, Orleans Town Clerk-Treasurer

Phone: 812-865-2539

If you want to learn more about your water utility, we invite you to attend our regular meetings at the Orleans Town Hall at 5:00 p.m. on the third Thursday of each month at 161 E. Price Ave., Orleans, IN 47452. In addition, we meet on the first Wednesday of each month at 9:00 a.m. for a work-study session at the same location.

YOU TOO CAN HELP PROTECT GROUNDWATER

Recycle household hazardous waste (HHW) and follow label instructions when applying herbicides or pesticides. Properly dispose of medicines, paint, batteries, etc.

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.

Sources of Drinking Water

ORLEANS WATER WORKS is purchased surface and ground 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	SOUTH PIT	Surface water		Patoka Lake
PATOKA LAKE REGIONAL- IN5219012	NORTH PIT	Surface water		Patoka Lake
PATOKA LAKE REGIONAL- IN5219012	575	Surface water		Patoka Lake

Source Name		Type of Water	Report Status	Location
MITCHELL WATER DEPARTMENT- IN5247003	INTERCONNECTION	Ground Water		Lawrence County

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 EPA's 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.

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 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.

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 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 <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.

ORLEANS WATER WORKS Public Water Supply ID: IN5259003

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	2	ppm	-	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.

Unregulated Contaminant Monitoring Rule (UCMR) (See Patoka Lake Regional Water District results below)	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	2021 - 2024	0.296	0.016 - 0.366	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2021 - 2024	1.85	1.17 - 4.08	ppb	15	0	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)	1018 S MAPLE ST	2023 - 2024	38.3	15.7 - 48.7	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	830 N MAPLE ST	2023 - 2024	40.2	16.1 - 53.3	ppb	60	0	By-product of drinking water disinfection
TTHM	1018 S MAPLE ST	2023 - 2024	38	21.3 - 53.1	ppb	80	0	By-product of drinking water chlorination
TTHM	830 N MAPLE ST	2023 - 2024	36.7	20.5 - 49.8	ppb	80	0	By-product of drinking water chlorination

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
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Violations

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

Violation Period	Analyte	Violation Type	Violation Explanation
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No violations during this period.

There are no additional required health effects notices.

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.

Lead Service Line Inventory:

- In 2024, the entire Orleans Water distribution system was investigated for the presence of lead water mains and service lines.
- An exhaustive review of existing paper records dating back to the 1960's, of more recent digital records kept on computer servers, returned customer surveys, and all 900+ meter pits were opened and visually inspected on both the utility and customer side to determine the line material. By these methods, approximately 800 of the 900+ customer services were eliminated as potentially containing lead and customer notification letters were sent out prior to November 24, 2024.
- The Lead Service Line Inventory for the Orleans Water Department can be reviewed at the Orleans Town Hall, 161 E Price Ave., Orleans, IN 47452 during regular business hours.
You can also access the following public link: <https://pws-ptd.120wateraudit.com/OrleansWW-IN>

Reseller Contaminants

PATOKA LAKE REGIONAL WATER Public Water Supply ID: IN5219012

Our water system tested a minimum of 15 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
CHLORAMINE	2024	3	ppm	0.8 - 3.8	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.

Unregulated Contaminant Monitoring Rule (UCMR)

Patoka Lake Regional Water and Sewer District

Large and small public water systems (PWSs) subject to UCMR 5 (i.e., community water systems (CWSs) and non-transient non-community water systems (NTNCWSs)) are required to notify customers about their UCMR 5 results.

Patoka Lake Regional Water and Sewer District (IN5219012) collected samples under the U.S. EPA Unregulated Contaminants Monitoring Rule (UCMR) for 29 PFAS Compounds and Lithium. This monitoring is conducted in compliance with reporting of the data requirements to determine what, if any additional compounds may need to be regulated in drinking water in the future. We collected samples on September 20th, 2023; December 27th, 2023; March 25th, 2024; August 6th, 2024

and did not detect any contaminants above the reporting limits of the tests required for UCMR 5 in our finished drinking water. However, these compounds are not regulated at this time.

If you would like to review the results, contact;

Adam Scherle
Water Plant Superintendent
adamscherle@plrws.net
(812)-678-8314

Steve Dodd
General Manager
steve@plrws.net
(812)-678-8322

As a Public Water System (PWS), we are required to notify our customers that the UCMR results are available (40 CFR 141.207) no later than 12 months after they are known. Results are to be delivered to all billing customers each year by July 1 (40 CFR 141.204[d]).

For more information, please contact the public water system:

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.

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 - 2023	0.423	0.0047 - 1.3	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2020 - 2023	6.7	0.5 - 17	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)	FINCH NEWTON VALVE PIT	2023 - 2024	35	20.7 - 47.4	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	LYNNVILLE VALVE PIT	2023 - 2024	36	22.2 - 46.8	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	OAKLAND CITY VALVE PIT	2023 - 2024	39	19.6 - 57.8	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	PAOLI VALVE PIT	2023 - 2024	38	18.6 - 61	ppb	60	0	By-product of drinking water disinfection
TTHM	FINCH NEWTON VALVE PIT	2023 - 2024	39	19.4 - 61.3	ppb	80	0	By-product of drinking water chlorination
TTHM	LYNNVILLE VALVE PIT	2023 - 2024	39	17.9 - 65.8	ppb	80	0	By-product of drinking water chlorination
TTHM	OAKLAND CITY VALVE PIT	2023 - 2024	42	20.6 - 68.8	ppb	80	0	By-product of drinking water chlorination
TTHM	PAOLI VALVE PIT	2023 - 2024	38	16.7 - 59.3	ppb	80	0	By-product of drinking water chlorination

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

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	12	NO	0.21	November	TREATMENT PLANT #1	Yes
100.00	12	NO	0.24	July	TREATMENT PLANT #2	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	8/11/2024	4.49	2.04 - 4.49	MG/L	0	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
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No violations during this period.

Additional Required Health Effects Language:

Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. There are no additional required health effects violation notices.

Reseller Contaminants

MITCHELL WATER DEPARTMENT Public Water Supply ID: IN5247003

Our water system tested a minimum of 6 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	1	ppm	0.4 - 1.1	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.

Unregulated 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	2021 - 2024	0.035	0.011 - 0.07	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2021 - 2024	1.22	1.22 - 1.76	ppb	15	0	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)	CITY HALL - 407 S 6TH ST	2023 - 2024	2	2.48 - 2.48	ppb	60	0	By-product of drinking water disinfection
TTHM	CITY HALL - 407 S 6TH ST	2023 - 2024	9	8.94 - 8.94	ppb	80	0	By-product of drinking water chlorination

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
BARIUM	7/18/2022	0.03	0.03	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	7/18/2022	0.097	0.097	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	7/15/2024	1.91	1.91	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Violations

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

Violation Period	Analyte	Violation Type	Violation Explanation
12/31/2023 - 2/3/2025	LEAD & COPPER RULE	LEAD CONSUMER NOTICE (LCR)	Failed to meet content, delivery, and/or reporting requirements for lead consumer notification
7/9/2024 - 8/5/2024	CONSUMER CONFIDENCE RULE	CCR REPORT	Failed to deliver Consumer Confidence Report to the state or consumers on time
8/31/2024 - 9/29/2024	E. COLI	REPORT SAMPLE RESULT/FAIL MONITOR RTCR	Failed to provide coliform sample results to the state or provide notification that a monitoring violation occurred

There are no additional required health effects notices.

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.