ANNUAL REPORT

2025 (2024 Data)

DRINKING WATER QUALITY

At Jackson Energy Authority, our mission is to provide our customers with the most reliable drinking water supply at the highest quality. We are pleased to report that your drinking water is safe and continues to exceed all government requirements.

Jackson Energy Authority
One thing you can count on.

Water is one of the most important resources available - it makes up about two-thirds of the human body and influences all bodily processes. Without water, people would not survive.

Tap water is such an integral part of life that it is hard to imagine a day without it. And, any measure of a successful society – low mortality rates, economic diversity, productivity, public safety – is in some way related to access to safe water.

The ability to turn on the tap for a clean, great tasting, refreshing drink of water is an achievement that this community is fortunate to have. Jackson Energy Authority constantly strives to not only protect our water supply, but also provide our customers with the safest, most reliable drinking water supply at the highest quality.

GOT UNUSED, EXPIRED MEDS?
DON'T FLUSH!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medications helps protect you and the environment. Keep medications out of Tennessee's waterways by dropping them off in one of the permanent pharmaceutical take-back bins. There are over 350 take-back bins located across the state. To find a convenient location, please visit http://tdeconline.tn.gov/rxtakeback/.

Jackson Energy Authority water is checked regularly and tested thoroughly every day before it arrives at your tap.

THE WATER WE DRINK

To help safeguard our water supply, we work with stringent state and federal standards to protect, treat and deliver the water we drink. Water quality technicians run daily tests on our treated water to determine the vulnerability of our water source to potential contamination.

ABOUT SOURCE WATER

We pump our water from 18 deep wells from the Memphis Sands aquifer (underground water bearing zone). The water follows a process where it is treated, filtered and tested at our two water treatment plants.

SOURCE WATER ASSESSMENT

All states were required by Congress in the 1996 Safe Drinking Water Act Amendments to develop a Source Water Assessment Program for the assessment of the potential contamination of public water system ground water and surface water sources.

The Tennessee Department of Environment & Conservation (TDEC) has assessed the untreated water sources serving water to our system to identify potential contaminants. As part of the Source Water Assessment Program, water sources receive ratings of reasonably susceptible (high), moderately susceptible (moderate) or slightly susceptible (low) based on geologic factors and human activities in the vicinity of the water. The Jackson water system sources rated as reasonably susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at: www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html, or received upon request by calling 1-888-891-8332. You may also contact JEA to obtain copies of the assessment.

WELLHEAD PROTECTION

Wellhead Protection is a way to prevent drinking water from becoming polluted by managing potential sources of contamination in the area which supplies water to a public well. Much can be done to prevent pollution, such as the wise use of land and chemicals. Public health is protected and expense of treating polluted water or drilling new wells is avoided through wellhead protection efforts. For information about our Wellhead Protection Plan, please call 731-422-7500.

DRINKING 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 water poses a health risk.

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.

Get more information about contaminants and potential health effects by calling the Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 1-800-426-4791.

Contaminants That May Be Present In Source Water:

- 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 and the Tennessee Department of Environment and Conservation prescribe 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.

POPULATION VULNERABILITY

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. 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 at 800-426-4791. For information about drinking water, visit https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/drinking-water-redirect.html.

LEAD IN DRINKING WATER

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Jackson Energy Authority is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Jackson Energy Authority at 731-422-7500. 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.

To access information on the service line materials at your property, you can find Jackson Energy Authority's most recent Water Service Line Inventory at https://www.jaxenergy.com/inventory.

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

TERMS & ABBREVIATIONS USED IN THE REPORT

MCL - Maximum Contaminant Level - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.
MRDL - Maximum Residual Disinfectant Level - The highest level of disinfectant allowed in drinking water.
MRDLG - Maximum Residual Disinfectant Level Goal - The level of a drinking water disinfectant below which there is no known or expected risk to health.
AL - Action level - The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
TT - Treatment technique - A required process intended to reduce the level of a contaminant in drinking water.
BDL-Below Detection Limit - The contaminant was not detected or was below the detection level in the sample.

UNITS OF MEASURE

- ppb - parts per billion or micrograms per liter. (One ppb is explained as one penny in $10,000,000.)
- ppm - parts per million or milligrams per liter. (One ppm is explained as one penny in $10,000.)
- MFL - Million fibers per liter, used to measure asbestos concentration.
- NTU - Nephelometric Turbidity Units - Turbidity is a measure of the clarity of the water. Turbidity in excess of 5 NTUs is just noticeable to the average person.

CROSS CONNECTIONS

Jackson Energy Authority works to prevent cross connections within our water system by following a State approved Cross Connection Control Policy. A cross connection occurs when a non-drinking water source comes in contact with our drinking water system. Every Jackson Energy Authority commercial customer and any residential customer with a swimming pool and/or lawn irrigation system connected directly to the water system must install and maintain a backflow prevention device. This device prevents water from flowing backward and re-entering the main water supply. A backflow prevention brochure is available by calling 731-422-7500.

2025 WATER QUALITY REPORT SUMMARY

Jackson Energy Authority conducts daily testing and monitoring to ensure that your water meets all quality standards. In the year 2024, we conducted more than 41,000 tests for more than 100 contaminants that could be found in your drinking water. The results of our monitoring are reported in the following charts. While most monitoring was conducted during the period of January 1 to December 31, 2024, certain substances are monitored less than once a year. For these substances, the date of the last sample is on the chart.

FIFTH UNREGULATED CONTAMINANT MONITORING RULE (UCMR 5)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted. For additional information, call the Safe Drinking Water Hotline at (800) 426-4791.

	Range Detected	Date of Sample
General Characteristics		
Calcium (ppm)	11.4- 22.4 mg/L	2024
Hardness (ppm)	31 - 84 mg/L	2024
Alkalinity (ppm)	26 - 48 mg/L	2024

Contaminant	Level Detected	Range Detected	Date of Sample
Perfluorooctane sulfonic acid (PFOS), ppb	0.0152	0.0104-0.0200	2024
Perfluorobutane sulfonic acid (PFBS), ppb	0.00365	0.0036-0.0037	2024
Perfluorohexane sulfonic acid (PFHxS), ppb	0.01495	0.0136-0.0163	2024

By comparing the columns in the charts, specifically the level detected with the MCLG and MCL, you can see that Jackson's drinking water is safe. Any detected level is well below the state and federal maximum for contaminants.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (i.e. people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice/CCR in a public place or distributing copies by hand or mail.

If you have any questions or require any additional information on this matter, please call 731-422-7500.

	Violation Y/N	Level Detected	Range Detected	Date of Sample
Unregulated Volatile Organic Contaminants				
Methyl tert-Butyl ether (ppb)	N	0.525	BDL-0.700	2024
Bromodichloromethane (ppb)	N	0.573	BDL-0.800	2024
Dibromochloromethane (ppb)	N	0.808	BDL-1.100	2024
Naphthalene (ppb)	N	0.733	BDL-3.300	2024
Hexachlorobutadiene (ppb)	N	0.558	BDL-1.200	2024

Contaminants	Violation Y/N	Level Detected	Range Detected	Date of Sample	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants							
Fluoride (ppm)	N	0.73 avg.	0.68-0.76	2024	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer & aluminum factories.
Nitrate (ppm)	N	2.34	1.33-2.34	2024	10	10	Runoff from fertilizer use; leaching from septic sewage; erosion of natural deposits.
Lead (ppb) *0 of 30 sites exceeded the action level for lead*	N	0.3 (90th percentile)	0.1-10.7	2022	0	AL=15	Corrosion of home plumbing systems; erosion of natural deposits.
Copper (ppm) *0 of 30 sites exceeded the action level for copper*	N	0.161 (90th percentile)	0.0032-0.258	2022	1.3	AL=1.3	Corrosion of home plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Sodium (ppm)	N	10.50	4.93-10.50	2023	N/A	N/A	Erosion of natural deposits; used in water treatment.
Chlorine (ppm)	N	1.41	0.64-1.81	2024	MRDLG = 4	MRDL = 4	Water additive used to control microbes.
Arsenic (ppb)	N	0.5	0.3-0.5	2023	0	10	Erosion of natural deposits; Run off from orchards; Run off from glass and electronic production wastes.
Barium (ppm)	N	0.045	0.020-0.045	2023	N/A	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion from natural deposits.
Chromium (ppb)	N	0.9	ND-0.9	2023	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
Regulated Contaminants							
Fecal Coliform and E. Coli	N	0		2024	0	0	
Total Coilform Bacteria (% positive samples)	N	Highest mo. = 1.79% Ann.Avg. = 0.14%		2024	0	5%	Naturally present in the environment; used as an indicator that other harmful bacteria may be present.
Turbidity (NTU) *SEE FOOTNOTE BELOW	N	0.118	0.014-0.118	2024	1.0 Monthly avg.; 2.0 consecutive daily avg.	1.0 Monthly avg.; 2.0 consecutive daily avg.	Soil runoff, no health effects but can interfere with disinfection and may indicate the presence of disease-causing organisms.
Volatile Organic Contaminants							
TTHM [Total Trihalomethanes] (ppb)	N	10.2	4.9-10.2	2024	N/A	80	By-product of drinking water chlorination.
Haloacetic Acids (ppb)	N	2.0	1.0-2.0	2024	N/A	60	By-product of drinking water chlorination.
Tetrachloroethylene (ppb)	N	0.700	BDL-0.700	2024	0	5	Discharge from factories and dry cleaners
Toluene (ppm)	N	0.0005	BDL -0.0005	2024	1	1	Discharge from petroleum factories.
Xylenes, Total (ppm)	N	0.00054	BDL -0.00054	2024	10	10	Discharge from petroleum factories. Discharge from chemical factories.

*FOOTNOTE ON TURBIDITY: Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. We met the MCL for turbidity with a lowest monthly % of 100% below the turbidity limit of 1.0 NTU monthly average and 2.0 NTU on any two consecutive days.

For more information, attend Jackson Energy Authority Board Meetings at 10am on the fourth Thursday of each month at The Tennergy Center, 250 North Highland Ave.

Unregulated contaminant monitoring data is available for review. If you'd like to speak with someone about this report or have a copy mailed to you, please call 731-422-7500. Paper copies are available at our Customer Center locations: Midtown - 351 Dr. Martin Luther King Jr. Dr. or North - 2030 Pleasant Plains Ext. Jackson Energy Authority is an equal opportunity employer.

FOR A PAPER COPY, CALL 731-422-7500 OR TO DOWNLOAD A PRINTABLE COPY, VISIT WWW.JAXENERGY.COM/JEACCR.

www.jaxenergy.com/jeaccr

SAFE, HIGH-QUALITY DRINKING WATER FROM THE TAP