

2024 Annual Drinking Water Quality Report
Dixie Community Utility Association
PWS#: 0180005
May 2025

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

About Our System

All board members have received the basic board training as required by the Mississippi State Department of Health. The board President, Vice-President and Secretary/Treasurer have also received the additional training.

Due to the ever growing population in our community and the increase in water supply, the association has been in the process of drilling a new well at the Bonhomie Plant. The well was completed and went online September 26, 2024.

Contact & Meeting Information

If you have any questions about this report or concerning your water utility, please contact Anthony Clark at 601.270.1576. We want our valued customers to be informed about their water utility. If you want to learn more, please attend the annual meeting scheduled for November 21, 2025 at 6:00 PM at the Dixie Community Utility Association at 500 Elks Lake Rd, Hattiesburg, MS 39401.

Source of Water

Our water source is from wells drawing from the Middle Catahoula, Lower Catahoula and the Hattiesburg Formation Aquifers. The source water assessment has been completed for our public water system to determine the overall susceptibility of its drinking water supply to identify potential sources of contamination. A report containing detailed information on how the susceptibility determinations were made has been furnished to our public water system and is available for viewing upon request. The wells for the Dixie Community Utility Association have received lower susceptibility rankings to contamination.

Period Covered by Report

We routinely monitor for contaminants in your drinking water according to federal and state laws. This report is based on results of our monitoring period of January 1st to December 31st, 2024. In cases where monitoring wasn't required in 2024, the table reflects the most recent testing done in accordance with the laws, rules, and regulations.

As water travels over the surface of land or underground, it dissolves naturally occurring minerals and, in some cases, radioactive materials and can pick up substances or contaminants from the presence of animals or from human activity; microbial contaminants, such as viruses and bacteria, that 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 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. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily indicate that the water poses a health risk.

Terms and Abbreviations

In the table you may find unfamiliar 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 that a water system must follow.*

Locational Running Annual Average(LRAA): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

LSLI: *Lead Service Line Inventory*

Maximum Contaminant Level (MCL): 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.

Maximum Contaminant Level Goal (MCLG): The "Goal"(MCLG) is 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 (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary to control microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Parts per billion (ppb) or micrograms per liter: one part by weight of analyte to 1 billion parts by weight of the water sample.

Parts per million (ppm) or Milligrams per liter (mg/l): one part by weight of analyte to 1 million parts by weight of the water sample.

RAA: Running Annual Average

TEST RESULTS- Detected Contaminants								
Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measure -ment	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants – Viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.								
1. Total Coliform Bacteria	N	June	Positive	1	NA	0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Inorganic Contaminants – Salts and metals which can occur naturally in the soil or groundwater or may result from urban stormwater runoff. Industrial or domestic wastewater discharges, oil and gas production, mining, or farming.								
8. Arsenic	N	2022*	.6	No Range	ppb	n/a	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
10. Barium	N	2022*	.0324	.0071 -.0324	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
14. Copper	N	2022/24	.3	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
15. Cyanide	N	2021*	23.4	No Range	ppb	200	200	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
16. Fluoride	N	2022*	.88	.736 - .88	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead	N	2022/24	2	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
19. Nitrate (as Nitrogen)	N	2024	.167	.155 - .167	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	N	2024	130	10 - 130	ppm	20		Road Salt, Water Treatment Chemicals, Water Softeners and Sewage Effluents.
Disinfection By-Products – Substances formed when disinfectants, like Chlorine, used to treat drinking water react with naturally occurring materials in the water.								
81. HAA5	N	2024	.024 - LRAA	14.5 – 27.3	ppb	0	60	By-Product of drinking water disinfection.
82. TTHM [Total trihalomethanes]	N	2024	.074 - LRAA	19.2 – 84.4	ppb	0	80	By-product of drinking water chlorination.
Chlorine	N	2024	1.1 - RAA	.63 – 1.98	mg/l	0	MDRL = 4	Water additive used to control microbes

* Most recent sample. No sample required for 2024.

Sodium. EPA recommends that drinking water sodium not exceed 20 milligrams per liter (mg/L). Excess sodium from salt in the diet increases the risk of high blood pressure and cardiovascular disease.

Microbiological Contaminants:

(1) Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system.

During June 2024 we had one sample on our system that tested positive for total coliform. The resamples were clear and show we are meeting drinking water standards.

We are required to monitor your drinking water for specific contaminants on a monthly basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards.

TEST RESULTS – 2024 Non Detected Contaminates

Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL/MRDL	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants – Salts and metals which can occur naturally in the soil or groundwater or may result from urban stormwater runoff. Industrial or domestic wastewater discharges, oil and gas production, mining, or farming.								
20. Nitrite (as Nitrogen)	N	2024	ND		ppm	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Volatile Organic Contaminants – Compounds that have a high vapor pressure and low water solubility. Many VOCs are human-made chemicals that are used and produced in the manufacture of paints, pharmaceuticals, and refrigerants. VOCs typically are industrial.								
55. Benzene	N	2024	ND		ppb	0	5	Discharge from factories; leaching from gas storage tanks and landfills
56. Carbon tetrachloride	N	2024	ND		ppb	0	5	Discharge from chemical plants and other industrial activities
57. Chlorobenzene	N	2024	ND		ppb	100	100	Discharge from chemical and agricultural chemical factories
58. O-Dichlorobenzene	N	2024	ND		ppb	600	600	Discharge from industrial chemical factories
59. P-Dichlorobenzene	N	2024	ND		ppb	75	75	Discharge from industrial chemical factories
60. 1,2-Dichloroethane	N	2024	ND		ppb	0	5	Discharge from industrial chemical factories
61. 1,1-Dichloroethylene	N	2024	ND		ppb	7	7	Discharge from industrial chemical factories
62. cis-1,2-Dichloroethylene	N	2024	ND		ppb	70	70	Discharge from industrial chemical factories
63. trans-1,2-Dichloroethylene	N	2024	ND		ppb	100	100	Discharge from industrial chemical factories
64. Dichloromethane	N	2024	ND		ppb	0	5	Discharge from pharmaceutical and chemical factories
65. 1,2-Dichloropropane	N	2024	ND		ppb	0	5	Discharge from industrial chemical factories
66. Ethylbenzene	N	2024	ND		ppb	700	700	Discharge from petroleum refineries
67. Styrene	N	2024	ND		ppb	100	100	Discharge from rubber and plastic factories; leaching from landfills
68. Tetrachloroethylene	N	2024	ND		ppb	0	5	Leaching from PVC pipes; discharge from factories and dry cleaners
69. 1,2,4-Trichlorobenzene	N	2024	ND		ppb	70	70	Discharge from textile-finishing factories
70. 1,1,1-Trichloroethane	N	2024	ND		ppb	200	200	Discharge from metal degreasing sites and other factories
71. 1,1,2-Trichloroethane	N	2024	ND		ppb	3	5	Discharge from industrial chemical factories
72. Trichloroethylene	N	2024	ND		ppb	0	5	Discharge from metal degreasing sites and other factories
74. Toluene	N	2024	ND		ppm	1	1	Discharge from petroleum factories
75. Vinyl Chloride	N	2024	ND		ppb	0	2	Leaching from PVC piping; discharge from plastics factories
76. Xylenes	N	2024	ND		ppm	10	10	Discharge from petroleum factories; discharge from chemical factories

LEAD EDUCATIONAL STATEMENT

Lead can cause serious health problems, especially for pregnant women and your children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Our water system is responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact our water system. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure are available at <https://www.epa.gov/safewater/lead>. The MS Public Health Laboratory (MPHL) can provide information on lead and copper testing and/or other laboratories certified to analyze lead and copper in drinking water MPHL can be reached at 601.576.7582.

The Dixie Community Utility Association has completed the Lead Service Line Inventory, and no lead lines were found. The methods used to make that determination were visual inspections, water operator knowledge and archived records. This inventory report is available for viewing at our office upon request.

VIOLATIONS

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1.800.426.4791.

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 microbiological contaminants are available from the Safe Drinking Water Hotline 1.800.426.4791.

The Dixie Community Utility Association works around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.