

2024 Annual Drinking Water Quality Report
CHARLESTON UTILITIES
PWS ID# 0680002
June 2025

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. 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 and to providing you with this information, because informed customers are our best allies. Our wells draw from the Meridian Upper Wilcox and the Middle Wilcox Aquifers.

Contact and Meeting Information

If you have any questions about this report or concerning your water, please contact Mayor Sedrick Smith at (662)647-5249. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held at 5:00 P.M. on the 1st Tuesday of each month at city hall.

Source of Water

A Source Water Assessment has been completed for our public water system to determine the overall susceptibility of the drinking water supply and to identify potential sources of contamination. The general susceptibility rankings assigned to each well of this system are provided immediately below. A report containing detailed information on how the susceptibility determinations were made has been furnished to our public water supply and is available upon request. The wells for City of Charleston have received moderate ranking to contamination.

Covered Period by Report

We routinely monitor for over 150 contaminants in your drinking water according to Federal and State laws. The table below lists all the drinking water contaminants that we detected in the last round of sampling for the particular contaminant group. Unless otherwise noted the data presented in this table is from testing done January 1 through December 31, (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 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. All drinking water, including bottled water may be reasonably expected to contain at least small amounts of some constituents. The presence of contaminants does not necessarily indicate that water poses a health risk.

Terms and Abbreviations

In this table 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 contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

Maximum Contaminant Level Goal – 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 million (ppm) or Milligrams per liter (mg/L) – one part by weight of analyte to 1 million parts by weight of the water sample.

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

Inorganic Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range of detects or # of samples exceeding MCL/ACL	MCLG	MCL	Likely Source of Contamination
10. Barium (ppm)	2022*	N	0.0266	0.0259 – 0.0266	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
16. Fluoride (ppm)	2022*	N	0.104	0.103 – 0.104	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead (ppb)	2023*	N	1	0	0	AL = 15	Corrosion of household plumbing systems, erosion of natural deposits

Disinfectants and Disinfection Byproducts Contaminants

81. HAA5 (ppb)	2024	N	0.007	0.000-06.500	0	60	By-product of drinking water disinfection
82. TTHM (ppb)	2024	N	0.015	0.000-15.000	0	80	By-product of drinking water disinfection
Chlorine (ppm)	2024	N	0.60	0.42 – 0.62	0	MRDL = 4	Water additive used to control microbes

Unregulated Contaminants

Sodium (ppb)	2023*	N	74.2	97-100	20	None	Road Salt, Water treatment Chemicals, Water Softeners and Sewage Effluents
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*Most recent sample. No sample required for 2023.

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.

We are required to monitor your drinking water for specific contaminants monthly. Results of regular monitoring are an indicator of whether our drinking water meets health standards. To ensure systems complete all monitoring requirements, MSDH now notifies systems of any samples prior to the end of monitoring period.

In addition to the above contaminants, we tested for additional chemicals for which the state and EPA have set standards. We found no detectable levels of those chemicals.

Violations

Our system had no violations as you can see by the table above. We are proud that your drinking water meets all State and Federal requirements. Some contaminants may have been detected; however, your water is safe at these levels according to EPA.

Lead Information

If present, elevated levels of lead can cause serious health problems, especially for pregnant woman and your children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Charleston is 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. 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>. The Mississippi State Department of Health Public Laboratory offers lead testing for \$10 per sample. Please contact 601-576-7582 if you wish to have your water tested.

Our system 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.

Unregulated Contaminants

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.

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 posed 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 (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 (800-426-4791).

The City of Charleston is working hard 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.