# THE COMMISSIONERS OF PUBLIC WORKS OF THE TOWN OF SUMMERVILLE 2023 ANNUAL DRINKING WATER QUALITY REPORT SCDHEC System ID SC1810003

# We're pleased to report that your water is safe and meets all federal and state requirements.

The Safe Drinking Water Act requires all public water systems to issue an annual report to their customers. This report is to inform you about the quality of water and services we deliver every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. Our water source is Lake Moultrie, a 60,000 acre fresh water lake that is part of the Catawba-Santee water basin. The Source Water Assessment has been completed for the Santee Cooper Regional Water System. A copy of this report can be found on the internet:

http://www.scdhec.gov/sites/default/files/docs/HomeAndEnvironment/Docs/Watershed/wwqa/Santee WWQA 2013.pdf



The Santee Cooper Regional Water System, EPA and American Water Works Association have joined forces as part of the Partnership for Safe Water Program. This voluntary program is designed to go beyond the Partnership for Safe Water program for greater than 20 years.

In order to provide you with the highest quality water at the most economical price, Berkeley County Water & Sanitation Authority, the City of Goose Creek, Moncks Corner Public Works Commission and the Summerville Commissioners of Public Works have joined forces with Santee Cooper in the development of the Santee Cooper Regional Water System. The Santee Cooper Regional Water System is comprised of a 40 million gallon per day surface water treatment plant and 26 miles of water transmission pipeline. This facility began commercial operation in 1994.

The regional system treats and transmits the water to Summerville CPW for distribution to your home. Summerville CPW maintains approximately 390 miles of distribution pipelines.

The Santee Cooper Regional Water System and Summerville CPW routinely monitor for constituents

in your drinking water according to federal and state laws. The attached table shows the results of our monitoring for the period of January 1 to December 31, 2023. Some constituents do require annual testing; therefore, the most recent results have reported. No reported results are more than 5 years old.



For more information contact:
Summerville CPW
PO Box 817
Summerville, SC 29484
843-871-0810 / www.summervillecpw.com
Public Meetings normally scheduled:

215 N. Cedar St / Summerville, SC 29483
4th Tuesday of each month at 3:00 pm

# Monitoring Period of Jan 1 – Dec 31, 2023

| Constituent (units)   | MCLG    | MCL  | Level<br>Detected        | Range of<br>Detections | Violation<br>Yes/No | Source of Constituent   |
|---|---------|--|--------------------------|------------------------|---------------------|---|
| Total Coliform Bacteria (P/A)                                 | 0       | 5%   | 0                        | 0                      | No                  | Naturally Present in the Environment  |
| Fecal Coliform and E. Coli (P/A)                              | 0       | 0  | 0                        | 0                      | No                  | Human and Animal Fecal Waste  |
| *Turbidity (NTU) - Highest Single<br>Measurement              | N/A     | TT ≤ 1<br>NTU                                | 0.12                     | 0.06 - 0.12            |                     |   |
| *Turbidity (NTU) - Lowest monthly % of samples meeting limits | 0.3 NTU | TT requires 95% of monthly samples ≤ 0.3 NTU | 100%                     | N/A                    | No Soil Runoff      |   |
| *Nitrate (measured as nitrogen) (ppm)                         | 10      | 10   | 0.26                     | 0.26                   | No                  | Runoff from fertilizer use; leaching from septic tanks & sewage; erosion on natural deposits.                 |
| *Sodium (ppm)   | N/A     | N/A  | 13                       | 13                     | No                  | Naturally Present in the Environment  |
| TTHM (Total Trihalomethanes) (ppb) a                          | None    | 80   | RAA = 31                 | 11 - 40                | No                  | By-product of Drinking Water Disinfection   |
| HAA5 (Haloacetic Acid 5) (ppb) <sup>a</sup>                   | None    | 60   | RAA = 14                 | 9 - 18                 | No                  | By-product of Drinking Water<br>Disinfection  |
| *Fluoride (ppm)   | 4       | 4  | 0.62                     | 0.62                   | No                  | Erosion of natural deposits; water additive for strong teeth; discharge from fertilizer & aluminum factories. |
| * Alpha emmiters (pCi/L)                                      | 0       | 15   | 1.02                     | 1.02                   | No                  | Erosion of natural deposits   |
| *TOC (Total Organic Carbon) (ppm)                             | N/A     | TT   | N/A <sup>b</sup>         | 1.6 - 2.30             | No                  | Naturally Present in the Environment  |
| Lead (ppb)  | 0       | AL = 15                                      | 90th% =<br>0.9 0>AL      | ND - 7                 | No                  | Corrosion of household plumbing. Erosion of natural deposits.   |
| Copper, Free (ppm)  | 1.3     | AL = 1.3                                     | 90th% =<br>0.065<br>0>AL | 0.002 - 0.12           | No                  | Corrosion of household plumbing.<br>Erosion of natural deposits.  |
| Constituent (units)   | MRDLG   | MRDL   | Level<br>Detected        | Range of<br>Detections | Violation<br>Yes/No | Source of Constituent   |
| *Chloramines (ppm)  | 4       | 4  | 3.17°                    | 3.10 - 3.17            | No                  | Water additive used to control microbes   |
| Chlorine (ppm)  | 4       | 4  | 2.9                      | 0.5-3.8                | No                  | Water additive used to control microbes   |

<sup>\*</sup>Sampling location is Santee Cooper Regional Water System's Treatment Facility

Summerville CPW has been designated as a reduced monitoring system for lead and copper by demonstrating low levels of lead and copper over an extended time period. Monitoring is required once every three (3) years. The Lead and Copper Results are from 2023 sampling period.

Fluoride is a naturally occurring element that is added to toothpaste, mouthwash, and public water supplies to help prevent tooth decay. The Santee Cooper Regional Water System maintains fluoride concentrations in accordance with EPA and DHEC recommendations.

Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s) are formed as a by-product of the disinfection process to kill harmful bacteria. In order to minimize the level of TTHMs and HAA5s, a secondary disinfectant (chloramines) which minimizes the formation of TTHMs and HAA5s is added to the distribution system. The above results are based on quarterly sampling in 2023.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

MCLs are set at very stringent levels. To understand the possible health effects associated with many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the associated health effect.

a Compliance determined by RAA, not individual samples

b Running Annual Average Removal Ratio for TOC is 1.34. Treatment Technique requires RAA Removal Ratio to be > 1.0

c Highest Quarterly Average

# Monitoring Period of Jan 1 - Dec 31, 2023

# **General Interest**

#### Sampling Location is Santee Cooper Regional Water System's Treatment Facility

| Constituent (units)          | MCL         | Average Level<br>Detected |
|------------------------------|-------------|---------------------------|
| Alkalinity (ppm)             | No Standard | 19                        |
| Total Hardness (ppm)         | No Standard | 25                        |
| Conductivity (umhos/cm)      | No Standard | 148                       |
| Temperature (C)              | No Standard | 20.8                      |
| pH (SU)                      | 6.5 to 8.5  | 7.82                      |
| Total Dissolved Solids (ppm) | 500         | 87.5                      |

#### **Abbreviations & Definitions**

| AL - | Action Level - concentration of a contaminant which, if exceeded, triggers treatment or other |
|------|---|
|      | requirements which a water system must follow.  |

- MCL Maximum Contaminant Level 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.
- MCLG Maximum Contaminant Level Goal 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.
- MRDL Maximum Residual Disinfectant Level 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.
- MRDLG Maximum Residual Disinfectant Level Goal 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 contamination.
- N/A Not Applicable
- ND Non-Detectable laboratory analysis indicates that the constituent is not present at the detection limit.
- NTU Nephelometric Turbidity Unit measure of the clarity of water.
- P/A Present/Absent
- pCi/L picoCuries per liter
- ppb Parts per billion or ug/l micrograms per liter one part per billion corresponds to one ounce in 7,350,000 gallons of water or to one minute in 2,000 years.
- ppm Parts per million or mg/l milligrams per liter one part per million corresponds to one ounce in 7,350 gallons of water or to one minute in two years.
- RAA Running Annual Average
- SU Standard Unit
- TT Treatment Technique required process intended to reduce the level of a contaminant in drinking water.
- umhos/cm Micromhos per centimeter measure of the ability for water to conduct electricity.

# EPA requires that all annual water quality reports contain the following statements:

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.

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. Contaminants that may be present in source water include:

- 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, 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 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.

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 EPA's Safe Drinking Water Hotline (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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791). 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. Summerville CPW 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 drinking 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.

# **ADDITIONAL INFORMATION**

### Inventory of Lead Service Lines

Since 1994, Summerville CPW has monitored lead and copper concentrations in the drinking water from a group of residences constructed prior to 1986, when the national ban on the use of lead in water lines went into effect. All results have been lower than the EPA action level. By October 2024, all water utilities are required to complete an inventory of all service line materials make it accessible to their customers. Summerville CPW has completed its inventory and submitted it to SCDHEC for review, using data collected from decades of maintenance and inventory records, interviews with long-time employees, and an EPA approved statistical model. Based on this data and results from regular sampling, Summerville CPW can certify with a high level of confidence that no lead service lines are present in its water distribution system.

#### PFAS - "Forever Chemicals"

New drinking water standards for "forever chemicals" or per- and polyfluoroalkyl substances (PFAS) were recently released by the EPA which will take effect in 2029. PFAS are a group of chemicals manufactured since the 1950's that are used to make coatings and products that resist water, heat, oil, stains, and grease. They are found in non-stick cookware, firefighting foam, food packaging, clothing, cosmetics, and many other items. PFAS do not break down in the environment, ultimately finding their way into drinking water sources such as lakes and rivers. Santee Cooper has been monitoring levels of PFAS chemicals in Lake Moultrie for several years and found PFAS in levels slightly higher than the new EPA standards. In anticipation of the new standards, Santee Cooper began evaluating new treatment options, assessing each option for effectiveness in removing contaminants and cost. Santee Cooper will be prepared to treat the source water for PFAS when the new standards take effect.