Berkeley County Water & Sanitation 212 Oakley Plantation Dr. Moncks Corner, SC 29461

ANNUAL DRINKING WATER QUALITY REPORT



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

As you can see by the enclosed table, our system had no violations. We are proud that your drinking water meets or exceeds all federal and state requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

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.

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. Moncks Corner Public Works Commission 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.

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. The contaminants that may be present in source water include: microbial (viruses & bacteria), inorganic (salts & metals), pesticides and herbicides, organic chemicals (by-products of industrial processes), and radioactive (natural or result of oil & gas production/mining). 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 (EPA's) Safe Drinking Water Hotline at 1NER c 1-800-426-4791.

As a means of providing you with the best water possible, 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 required regulations to provide the highest quality water possible.





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 water and services we deliver every day. As a service to you, we are pleased to provide you with this annual drinking water quality report. 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. 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 at www.scdhec.gov/HomeAndEnvironment/ Water/SourceWaterProtection/.

In order to provide you with the highest quality water at the most economical price, Berkeley County Water & Sanitation, the City of Goose Creek, Moncks Corner Public

BEC

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



your local water utility for distribution to your home. Your local water utilities maintain approximately 600 miles of distribution pipelines.

We want our valued customers to be informed about their water utility. If you have any questions about your water provider or this report, please contact your local utility listed on the inside of this report. If you want to learn more, please plan to attend one of your local water utilities' regularly scheduled meetings also listed on the inside of this report.

Santee Cooper Regional Water System and your local water utility routinely monitor for constituents in your drinking water according to federal and state laws. The enclosed table shows the results of our monitoring for the period of January 1 to December 31. Some constituents do not require annual testing, therefore, the most recent results have been reported. No reported results are more than 5 years old. All drinking water, including bottled water, may reasonably be



expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these constituents does not necessarily pose a health risk. More information about contaminants and potential health effects can be

obtained by calling EPA's Safe Drinking Water Hotline at 1-800-426-4791.

WHAT'S IN THE WATER?

Monitoring Period of Jan. 1 - Dec. 31, 2018

| Constituent (units) | MCLG | MCL | Level Detected | Range of Detections | Violation 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) | 0.3 - | TT=1 NTU | 0.2 | 0.06 - 0.20 | No | Soil Runoff |
| | | $\% \le 0.3$ NTU | 100% | | | |
| *Nitrate (measured as nitrogen) (ppm) | 10 | 10 | 0.081 | 0.081 | No | Runoff from fertilizer use; leaching from septic tanks & sewage; erosion on natural deposits. |
| TTHM (Total Trihalomethanes) (ppb) | none | 80 | RAA = 30 | 13.5 - 30.3 | No | By-product of Drinking Water Disinfection |
| HAA5 (Haloacetic Acid 5) (ppb) | none | e 60 RAA = 23 5.6 - 24.0 | | No | By-product of Drinking Water Disinfection | |
| *Fluoride (ppm) | 4 | 4 | 0.55 | 0.55 | No | Erosion of natural deposits; water additive for strong teeth; discharge from fertilizer & aluminum factories. |
| *TOC (Total Organic Carbon) (ppm) | N/A | TT | N/A ^a | 1.0 - 3.1 | No | Naturally Present in the Environment |
| Lead (ppb) | 0 | AL = 15 | $\begin{array}{c} 90 th\% = 0.74 \\ 0 > AL \end{array}$ | ND - 1.25 | No | Corrosion of household plumbing. Erosion of natural deposits. |
| Copper, Free (ppm) | 1.3 | AL = 1.3 | 90th% = 0.0978 0 > AL | 0.003 - 0.125 | No | Corrosion of household plumbing. Erosion of natural deposits. |
| Constituent (units) | MRDLG | MRDL | Level Detected | Range of Detections | Violation Yes/No | Source of Constituent |
| *Chloramines (ppm) | 4 | 4 | 3.10 ^b | 3.00 - 3.10 | No | Water additive used to control microbes |
| Chlorine (ppm) | 4 | 4 | 3.8 | 1.3 - 3.8 | No | Water additive used to control microbes |

* Sampling location is Santee Cooper Regional Water System's Treatment Facility

^a Running Annual Average Removal Ratio for TOC is 1.23. Treatment Technique requires RAA Removal Ratio to be > 1.0

^b Highest Quarterly Average

Note: Lead and Copper results are from 2016 sampling record.

Fluoride is a naturally occurring element; 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.

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.

| | Genera | l Int | er | est | | |
|------------|-----------|-------------------|-----|------|-----|------|
| Monitoring | Period of | ^f Jan. | 1 - | Dec. | 31. | 2018 |

| Constituent (units) | MCL | Average Level Detected |
|------------------------------|-------------|---------------------------|
| Alkalinity (ppm) | No Standard | 17 |
| Total Hardness (ppm) | No Standard | 21 |
| Conductivity (umhos/cm) | No Standard | 91 |
| Temperature (°C) | No Standard | 19.9 |
| pH (SU) | 6.5 to 8.5 | 7.88 |
| Total Dissolved Solids (ppm) | 500 | 81.25 |

More information about the water

UCMR4 (Unregulated Contaminant Monitoring Rule)

Berkeley County is currently participating in the UCMR4 program. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether regulation is warranted. The results for 2018 are listed below.

| Constituent | Level Detected (ppb) | Range of Detection (ppb) | Source of Constituent | | |
|--------------------------|----------------------------|--------------------------------|--|--|--|
| HAA5 (Haloacetic Acid) | 13.49 | 5.06 - 17.42 | By-product of drinking water disinfection | | |
| HAA6BR (Haloacetic Acid) | 6.11 | 1.94 - 8.64 | By-product of drinking water disinfection | | |
| HAA9 (Haloacetic Acid) | 19 | 7.00 - 25.07 | By-product of drinking water disinfection | | |
| Manganese | 1.138 | 0.664 - 1.72 | Naturally-occurring element; commercially available in combination with other elements and minerals | | |
| Quinoline | 0.1665 | 0.02 - 0.313 | Used as a pharmaceutical (anti-malarial) and flavoring agent; produced as a chemical intermediate; component of coal | | |

For more information, contact your local water provider at: **Berkeley County Water & Sanitation** Attn: Mike Blankenship **212 Oakley Plantation Drive** Moncks Corner, SC 29461 Phone: (843) 719-2370

> **Public meetings normally scheduled:** 1003 Hwy. 52 Moncks Corner, SC 29461 4th Monday of each month 7:00 pm

| AL - | Action Level - concentration of a contaminant which system must follow |
|------------|---|
| MCL - | Maximum Contaminant Level - is the highest level close to the MCLGs as feasible using the best avail |
| MCLG - | Maximum Contaminant Level Goal - is the level of expected risk to health. MCLGs allow for a margin |
| MRDL - | Maximum Residual Disinfectant Level - The higher evidence that addition of a disinfectant is necessary |
| MRDLG - | Maximum Residual Disinfectant Level Goal - The or expected risk to health. MRDLGs do not reflect tion. |
| ND - | Non Detectable - laboratory analysis indicates that |
| NTU - | Nephelometric Turbidity Unit - measure of the clar |
| P/A - | Present/Absent |
| pCi/l - | picocuries per liter - measure of the radioactivity in |
| ppb - | parts per billion or ug/l - micrograms per liter - one |
| ppm - | parts per million or mg/l - milligrams per liter - one |
| SU - | Standard Unit |
| TT - | Treatment Technique - required process intended to |
| umhos/cm - | micro mhos per centimeter |
| | |

Abbreviations & Definitions

ich, if exceeded, triggers treatment or other requirements which a water

- l of a contaminant that is allowed in drinking water. MCLs are set as ilable treatment technology.
- of a contaminant in drinking water below which there is no known or n of safety.
- est level of a disinfectant allowed in drinking water. There is convincing v for control of microbial contaminants.
- level of a drinking water disinfectant below which there is no known t the benefits of the use of disinfectants to control microbial contamina-

t the constituent is not present at the detection limit. rity of water

water

e part per billion corresponds to one minute in 2,000 years e part per million corresponds to one minute in two years

o reduce the level of a contaminant in drinking water