

Groundwater Monitoring System Certification

Site: Santee Cooper Cross Generating Station

CCR Unit: Closed Gypsum Pond

Santee Cooper retained Haley and Aldrich, Inc. to design and construct groundwater monitoring systems for Cross Generating Station's CCR units; which included system design, sampling and analyses plans and statistical analysis plans to meet requirements of §257.91. These groundwater monitoring systems were certified by a Haley and Aldrich Professional Engineer on October 16, 2017. The Cross Generating Station Closed Gypsum Pond was closed via removal of all gypsum and FGD slurry, and an underlying layer of soil pursuant to South Carolina Department of Health and Environmental Control (SCDHEC) regulations. Completed closure was approved by SCDHEC on March 11, 2017, which was prior to the CCR Rule's deadline for implementation of a groundwater program and the unit was not included in the original Cross Generating Station's CCR groundwater system. However, this CCR unit is still considered subject to some aspects of the CCR Rule since it was active as of the effective date of October 19, 2015 of the CCR Rule. Santee Cooper has modified and enhanced the groundwater monitoring system for Cross Generating Station to include the Closed Gypsum Pond.

This document addresses requirements of §257.91 Groundwater Monitoring Systems, specifically section §257.91(f). This document serves as certification that the Closed Gypsum Pond's groundwater monitoring system has been designed and constructed to meet requirements of §257.91. This certification has been prepared based in part upon information provided by Haley and Aldrich with the initial Cross Generation Station's groundwater monitoring system design and certification provided October 2017 pursuant to §257.91(b) and (e)(1) and a detailed hydrogeologic study conducted by Garrett & Moore in March 2012.

The groundwater monitoring system at Cross Gypsum pond exceeds the minimum requirement for one upgradient and three downgradient monitoring wells pursuant to §257.91(c). The actual number of wells used in the groundwater monitoring system include two upgradient and three downgradient wells. This number of wells is sufficient and appropriate to characterize the quality of groundwater in the uppermost aquifer from background groundwater not affected by leakage from Cross CCR units and from groundwater passing through the area that at one time was the boundary of the CCR waste based on site-specific conditions. The groundwater monitoring system was designed under my direction and the wells were installed and constructed by a South Carolina certified well driller to monitor the uppermost aquifer at the location where the Gypsum Pond once resided.

Certification:

Pursuant to CFR Title 40 Chapter I Subchapter I Part §257 Subpart D §257.91(f), I, Susan W. Jackson, being a professional engineer in good standing in the State of South Carolina, do hereby certify to the best of my knowledge, information and belief the groundwater monitoring system for Cross Gypsum Pond area has been designed and constructed to meet the performance standard in Sections §257.91(a)(1) and (2) of the Federal Coal Combustion Residuals Rule and to meet requirements of §257.91. The certification submitted is, to the best of my knowledge, accurate and complete.

A circular professional engineer seal for Susan W. Jackson, No. 25476, South Carolina. The seal contains the text "SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEER" around the perimeter and "No. 25476" in the center. A handwritten signature "Susan W. Jackson" and the date "10/12/2020" are written over the seal.