# Remedy Selection Semi-Annual Progress Report Cross Generating Station, Closed Gypsum Pond §257.97

#### Overview

The South Carolina Public Service Authority (Santee Cooper) is implementing the April 17, 2015, U.S. Environmental Protection Agency (U.S. EPA) Federal Coal Combustion Residuals (CCR) Rule (40 CFR § 257 and 261) for the Closed Gypsum Pond at the Cross Generating Station, located in Berkeley County, South Carolina.

# Requirement

§257.97(a) The owner or operator must prepare a semi-annual report describing the progress in selecting and designing the remedy. The *Assessment of Corrective Measures* (ACM) report for the Cross Gypsum Pond was completed in November 2023 and placed on the public website. Based on the results of the ACM, Santee Cooper must, as soon as feasible, select a remedy that meets the standards listed in §257.97(b). A summary of the progress selecting a remedy is provided in the sections below.

## Summary of Actions Completed to Date

For the second semi-annual progress reporting period of May 2024 – November 2024, the following interim measures and activities have been completed to support selecting and designing a remedy for the Closed Gypsum Pond:

- The Gypsum Pond was closed by removal under a state-approved (South Carolina Department of Health and Environmental Control or SCDHEC) closure plan in 2016 and confirmed complete by SCDHEC in March 2017.
- The second 2024 semi-annual groundwater monitoring event for the Closed Gypsum Pond occurred in June.
- Completed a statistical analysis of waste boundary and nature and extent wells for the June 2024 semi-annual sampling event, as required by §257.93(g).
- Replaced the abandoned monitoring well CGYP-6 prior to the semi-annual sampling event in June 2024. This well was moved due to construction of a new wastewater treatment system to comply with EPA's Steam Electric Power Effluent Limitations Guidelines (ELG) Rule.
- To investigate MNA demonstration as a viable remedy, soil samples were collected from additional borings to identify aquifer minerology and site-specific attenuation mechanisms.
- Ongoing activities completed to support nature and extent characterization and to support selection of the most appropriate remedy for the Closed Gypsum Pond are as follows:
  - Developed subsurface cross-sections utilizing information collected from well installations and previous geotechnical explorations. This updated and expanded the current Conceptual Site Model for the unit.
  - Recent data was analyzed to delineate the vertical and horizontal extent of groundwater exceedances associated with the Closed Gypsum Pond.
  - o Information from the updated Conceptual Site Model was used to identify additional activities that would ultimately support the most appropriate remedy selection.

## Planned Activities

Upcoming tasks related to the Closed Cross Gypsum Pond will include the following:

- Finalize the June 2024 statistical analyses for waste boundary wells. Results will be included in the 2024 Annual Groundwater Monitoring and Corrective Action Report.
- Reincorporate CGYP-5 into the waste boundary monitoring well network based on constituent concentrations identified during baseline sampling.
- Continue semi-annual groundwater monitoring under the assessment monitoring program until groundwater remedial activities are initiated.
- To investigate MNA demonstration as a viable remedy, conduct dissolved analysis for beryllium, cobalt, lead, and lithium and analyze soil samples collected from additional borings.
- Perform additional subsurface investigations, including cone penetration test borings, to develop a robust evaluation of the subsurface lithology and support remedy selection.
- Evaluate nearby hydrology to better understand the groundwater and stormwater interaction by installing additional piezometers in areas where no groundwater elevation data is available.
- Fully delineate the plume using data collected from nature & extent wells. Should data indicate the plume is not fully delineated, additional monitoring wells may be considered.
- Prepare the 2024 Annual Groundwater Monitoring and Corrective Action Report.
- Plan a public meeting at least 30 days prior to selecting a final remedy to meet the requirements specified in 40 CFR § 257.96(e).
- Prepare the next semi-annual progress report in May 2025, if needed.