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)

SynTerra Corporation prepared this semi-annual progress report on behalf of Santee Cooper. The owner or operator must submit a semi-annual report describing the progress in selecting and designing the remedy. The *Assessment of Corrective Measures* (ACM) report for the Closed 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 November 2024 – May 2025, the following interim measures and activities have been completed to support selecting and designing a remedy for the Closed Gypsum Pond:

- The Closed Gypsum Pond excavated under a state-approved (South Carolina Department of Health and Environmental Control or SCDHEC) closure plan in 2016, and closure was confirmed complete by SCDHEC in March 2017.
- The *Remedy Selection Semiannual Progress Report* for the period of May 2024 through November 2024, was prepared and posted to the public website.
- Statistical analysis for the June 2024 monitoring event was completed in accordance with § 257.95(d)(1). The following constituents were observed at statistically significant levels (SSLs) greater than groundwater protection standards (GWPS) in the following assessment monitoring wells.
 - o Beryllium CGYP-1, CGYP-3, CGYP-4, CGYP-6 and CGYP-7
 - o Cobalt CGYP-1, CGYP-2, CGYP-3, and CGYP-4, CGYP-6, CGYP-7
 - Lead CGYP-2, CGYP-3, CGYP-7
 - Lithium CGYP-3, CGYP-4, and CGYP-6
- Monitoring well CGYP-5 was reincorporated into the assessment monitoring well network based
 on findings from a preliminary nature and extent investigation. CGYP-5 was sampled during the
 January 2025 semiannual monitoring event and data will be included in the statistical analysis.
- The 2024 Annual Groundwater Monitoring Report pertaining to the January and June 2024 sampling events was prepared and posted to the public website.

- 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:
 - Recent data was analyzed to confirm Appendix IV constituent SSLs are delineated vertically and horizontally.
 - Continued sampling of the groundwater monitoring network to further develop the Appendix IV constituent database of SSLs.
- The first 2025 semi-annual groundwater monitoring event for the Closed Gypsum Pond occurred in January.
- Background values were updated to incorporate data collected from June 2023 through January 2025 in approved CCR Rule background monitoring wells. Updated background values will be applied to the January 2025 statistical analysis.

Planned Activities

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

- Finalize the January 2025 statistical analyses for assessment monitoring wells. Results will be included in the 2025 Annual Groundwater Monitoring and Corrective Action Report.
- Continue semi-annual groundwater monitoring under the assessment monitoring program to further develop the Appendix IV constituent SSL database and until groundwater remedial activities are initiated.
- To investigate monitored natural attenuation (MNA) demonstration as a viable remedy, conduct dissolved analysis for beryllium, cobalt, lead, and lithium and analyze soil samples collected from additional borings.
- Continue evaluating nearby hydrology to refine the understanding of the groundwater and surface water interaction. Additional piezometers may be installed in areas where no groundwater elevation data is currently available.
- Fully delineate the plume using data collected from nature & extent monitoring wells. Should data indicate the plume is not fully delineated, additional monitoring wells may be considered.
- 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 November 2025, if needed.

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