

Cannon, Jesse

From: Melchers, Joseph
Sent: Wednesday, April 13, 2016 10:48 AM
To: McMakin, Ryan
Cc: Cannon, Jesse; McCants, Matthew; Luhrs, Robert; Reed, Donald; Stevick, II, William; Jackson, Susan; Bunte-Bisnett, Denise
Subject: CGS - CCR Impoundment and Landfill Inspection Follow Up

Shea,

As you know, the Coal Combustion Residual impoundment and landfill inspection reports which we completed for Cross Generating Station noted several maintenance items which were required to be addressed within ninety (90) days of the date of the report (January 15, 2016). The following email details the condition of these items as of April 11, 2016. Jesse Cannon accompanied me on the follow up inspection.

Bottom Ash Pond

1. *Erosion of the downstream slope of the Bottom Ash Pond perimeter dike noted directly below both pipe bridges for the bottom ash feed lines on the southwestern side of the impoundment should be repaired within ninety (90) days of the date of this report.*

Repairs to the slope directly below both pipe bridges was completed using graded limestone aggregate base course. The repairs are satisfactory and appear to be mitigating further erosion in the area.

2. *Minor damage to the top of the inside slope and revetment of the perimeter dike noted near the rail car shop should be repaired and the crest road properly graded to direct water away from the area to avoid ponding of storm water during rain events within ninety (90) days of the date of this report.*

Repairs to the revetment and interior slope of the Bottom Ash Pond were properly completed. The crest road has also been properly re-graded to avoid ponding of water in this location. All repairs are satisfactory.

3. *Erosion of the downstream slope of the perimeter dike noted on the northeastern corner of the pond should be repaired and the area should be stabilized with vegetation within ninety (90) days of the date of this report to avoid further damage during storm events.*

Repairs to the downstream slope of the Bottom Ash Pond in this location have mitigated the erosion in this area. In addition, grass is being reestablished in the area. All repairs are satisfactory.

Gypsum Filtrate Pond

No items recommended for active maintenance in the January report.

Class 2 Landfill

1. *Minor erosion noted in several locations on the active face of the Class 2 Landfill and on the northern and southern slopes of the structure should be repaired within ninety (90) days of completion of this report. (NOTE: repairs to northern and southern slopes were completed within two (2) weeks of the date of inspection. The active face will be repaired as part of closure during the 1st and 2nd quarter of 2016).*

Repairs were completed as noted in the original inspection report (approximately two (2) weeks after the date of inspection). Repairs remain satisfactory.

2. *Clogged down drain inlets located on the 1st and 2nd benches on the northern and southern ends of the Class 2 Landfill should be cleaned out and re-lined with sediment tubes or silt fence within sixty (60) days of completion of this report. (NOTE: this maintenance was completed within two (2) weeks of the date of inspection).*

Repairs were completed as noted in the original inspection report (approximately two (2) weeks after the date of inspection). Repairs remain satisfactory and the downdrain inlets are clear.

3. *Erosion and undermining of the concrete revetment channel noted along the northern access ramp for the Class 2 Landfill should be repaired within ninety (90) days of completion of this report to improve drainage in the area and to prevent potential personnel/equipment safety concerns.*

Repairs to the concrete revetment channel along the northern access ramp of the landfill are satisfactory and have mitigated erosion concerns along the access ramp.

4. *Sediment buildup noted in the Class 2 Landfill perimeter drainage ditch should be cleaned out within sixty (60) days of completion of this report to avoid ponding of water around the toe of the landfill. (NOTE: this maintenance was completed within two (2) weeks of the date of inspection).*

Repairs were completed as noted in the original inspection report. The condition of this area remains satisfactory.

Class 3 Landfill

1. *Minor erosion in the foundation drainage layer just above the liner noted in the Class 3 Landfill should be repaired just prior to placement of waste in these areas. (NOTE: this repair was completed within two (2) weeks of the date of inspection).*

Repairs were completed as noted in the original inspection report. The condition of this area remains satisfactory.

All repairs have been completed on the Bottom Ash Pond, Class 2 Landfill, and Class 3 Landfill as recommended in the January 2016 report. Please let me know if you have any questions or need additional information regarding any of the items discussed in this correspondence.

Thanks,

Michael Melchers, P.E. | Engineer III, Civil Projects (OC-08)
Santee Cooper | 1 Riverwood Drive, Moncks Corner, SC 29461
☎ 843.761.8000 x5280
✉ michael.melchers@santeecooper.com