

November 2016

Tennessee Valley Authority
1101 Market Street
Chattanooga, TN 37402

**Notification of Intent to Close – CCR Surface Impoundment
EPA Final CCR Rule (40 CFR §257.102)
TVA Colbert Fossil Plant
Tuscumbia, Alabama**

1.0 PURPOSE

This letter documents the notice of intent to close the Ash Disposal Area 4 at Colbert Fossil Plant in accordance with the EPA Final CCR Rule §257.102(g).

2.0 NARRATIVE DESCRIPTION OF CLOSURE ACTIVITIES

The COF Ash Disposal Area 4 (Area 4) will be closed in place. The final cover system installed over Area 4 (approximately 57 acres) was designed and will be constructed to meet 40 CFR §257.102(d). Closure activities include, but are not limited to, decanting, subgrade preparation, final cover system installation, and the establishment of a vegetative cover. Final Closure of Area 4 is anticipated to include the following general tasks:

- Installing erosion and sediment controls
- Installing turbidity curtains as needed
- Begin decanting Area 4
- Regrading of materials from within Area 4 as necessary to achieve positive drainage and fill in decanted portions of the pond
- Remove existing structures and/or backfill with grout (including spillway and associated appurtenances)
- Final grading of in-place CCRs and lowering portions of the existing clay dike to achieve design top of subgrade elevations
- Constructing a cover system by installing the final cover system components
- Install permanent stormwater control structures
- Vegetating the surface of the cover

3.0 FINAL COVER SYSTEM

The closure of Ash Disposal Area 4 will employ an alternative cover system complying with the requirements found in 40 CFR §257.102(d)(3)(ii)(A) through (C) as provided below.

- (A) *The design of the final cover system must include an infiltration layer that provides an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (d)(3)(i)(A) and (B) of this section.*
- (B) *The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (d)(3)(i)(C) of this section.*
- (C) *The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.*



The alternative cover system includes (from base to top) a geomembrane, a geocomposite, no less than 18-inches of earthen material and a vegetative layer. This cover system provides a permeability no greater than 1×10^{-5} cm/sec or the permeability of the natural sub-soils, whichever is less.

Erosion will be minimized with the usage of a vegetative soil layer, consisting of seed or sod to protect the cover system from wind or water erosion.

The final cover was designed to accommodate settlement and subsidence, minimizing disruption of the integrity of the final cover system.

Based upon AECOM's review of the final design, AECOM has identified that design meets the requirements of the final cover system found in 40 CFR §257.102.

4.0 SCHEDULE FOR COMPLETING CLOSURE ACTIVITIES

The following sequential steps are necessary for completing the closure activities of 40 CFR §257.102 and their estimated scheduled completion dates are provided in Table 1: Schedule of Closure Activities. The closure schedule is subject to change due to contractor availability, subsurface conditions, weather, equipment, and available material resources.

Table 1: Schedule of Closure Activities

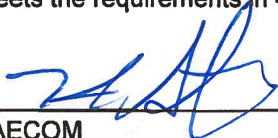
	Closure Activity	Estimated Date
1.	Preliminary Planning, Design, and Regulatory Agency Permitting	In Progress
2.	Decanting, Subgrade Stabilization, and Mass Grading	Fall 2016
3.	Final Cover Installation	2017
4.	Completion of closure	2017
5.	Completion of post-closure period	2047



5.0 QUALIFICATIONS AND CERTIFICATION

The signature of AECOM's authorized representative on this document represents that to the best of AECOM's knowledge, information and belief in the exercise of its professional judgment, it is AECOM's professional opinion that the aforementioned information is accurate as of the date of such signature. Any recommendation, opinion, or decisions by AECOM are made on the basis of AECOM's experience, qualifications and professional judgment and are not to be construed as warranties or guaranties.

Michael J. Stepic, being a Professional Engineer in good standing in the State of Alabama do hereby certify to the best of my knowledge, information and belief, that the information contained in this report is true and correct and has been prepared in accordance with the accepted practice of engineering. I certify pursuant to 40 CFR §257.102 (d)(3)(iii) that the design of the final cover system defined herein meets the requirements in 40 CFR § 257.102.

SIGNATURE 
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DATE 11/21/16

