



AECOM
1375 Euclid Ave. Suite 600, Cleveland, OH 44115

December 15, 2015

Tennessee Valley Authority
1101 Market Street
Chattanooga, Tennessee 37402

**Reference: Notification of Intent to Initiate Closure – Inactive CCR Surface Impoundment
EPA Final CCR Rule (40 CFR §257.100)
Sluice Trench
TVA Kingston Fossil Plant
Harriman, Tennessee**

1.0 PURPOSE

The purpose of this document is to provide notice of the intent to initiate closure under 40 CFR § 257.100(b) of the inactive Sluice Trench at the Kingston Fossil Plant.

2.0 NARRATIVE DESCRIPTION OF CLOSURE ACTIVITIES

Closure of the Sluice Trench as described herein is subject to the satisfactory completion of the required NEPA environmental review performed by TVA after the submission of this notice of intent. The following general tasks are anticipated as part of the closure process.

Plant waste water will be diverted from the Sluice Trench to by-pass ditch and discharged into the existing stilling pond. The Plant waste water will continue to be discharged through the NPDES permitted Outfall 001. Once the waste water flow from the plant has been diverted, the Sluice Trench will be regraded and an engineered cap system will be installed over the Sluice Trench footprint. The design of the final cover system will meet the CCR Rule standards, and any agreed upon, site-specific state requirements. The engineered cap will consist of the following materials, listed in order of construction (from bottom to top):

- 18 inches of compacted cover soil with a maximum permeability of 1×10^{-5} cm/s
- 6 inches of soil capable of sustaining vegetation.

If the selected borrow materials are not sufficiently impermeable, or if there is not a sufficient quantity, then a synthetic geomembrane will be included in the final cap design. This alternative cap system will consist of the following materials, listed in order of construction (bottom to top):

- 40-mil geomembrane,
- Geocomposite drainage layer,
- 24 inches of cover soil, of which the top 6 inches are capable of supporting vegetation.

The final cap system design will accommodate settling and subsidence so to preserve the cap system's integrity.

Soil backfill will be placed to the required elevations to properly drain stormwater runoff. The backfill material will be obtained from off-site sources. Vegetation will be established across the site.



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3.0 SCHEDULE FOR COMPLETING CLOSURE ACTIVITIES

Any schedule dates and duration timelines for construction activities are tentative and subject to change. The only date subject to a critical deadline is the completion of closure date by April 17, 2018, as stated in 40 CFR § 257.100 (b). The tentative schedule for closure activities includes:

- Site preparation and by-pass construction: May 2016
- Sluice Trench grading: September 2016
- Final cover system placement: April 2017
- Site grading and installation of erosion control layer: September 2017
- April 17, 2018 – deadline for completion of closure activities

4.0 QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

I, Thomas A. Kovacic, being a Professional Engineer in good standing in the State of Tennessee, do hereby certify, to the best of my knowledge, information, and belief that the information contained in this certification is prepared in accordance with the accepted practice of engineering. I certify pursuant to 40 CFR 257.100 (b)(4) that the design of the final cover system defined herein meets the requirements in 40 CFR § 257.100 (b)(3) (i). I further certify pursuant to 40 CFR § 257.100 (b) (6) that the closure of the CCR surface impoundment under 40 CFR § 257.100 (b)(1) through (4), as described herein, is technically feasible within the timeframe in 40 CFR §257.100 (b) of 40 CFR § 257.100.

SIGNATURE:  DATE 12/15/15

ADDRESS: 1375 Euclid Ave., Suite 600, Cleveland, OH 44115

TELEPHONE: (216) 622-2420

REGISTRATION NO. Tennessee PE 114283