

**AMENDED WRITTEN CLOSURE PLAN
40 C.F.R PART 257.102
PLANT BOWEN ASH POND 1 (AP-1)
GEORGIA POWER COMPANY**

SITE INFORMATION

Site Name / Address

Plant Bowen
317 Covered Bridge Rd. S.W.
Cartersville, GA 30120

Owner Name / Address

Georgia Power Company
241 Ralph McGill Blvd
Atlanta, GA 30308

CCR Unit

AP-1

Closure Method

Close by Consolidation

CLOSURE PLAN DESCRIPTION

§ 257.102(b)(1)(i) – Narrative description of how the CCR unit will be closed.

Plant Bowen AP-1 will be closed by excavating the entirety of CCR within the unit and consolidating the excavated CCR into an approximately 144-acre fully-lined, multi-cell storage facility situated within the current footprint of the unit. The CCR will be dewatered prior to placement in the containment cells. A base composite liner system and an enhanced final cover system will be placed over the entire containment area. In accordance with § 257.102(b)(3), this written closure plan will be amended if there is a change in operation that would substantially affect the written closure plan in effect or if there are unanticipated events that necessitate a revision of the closure plan.

§ 257.102(b)(1)(iii) – Closure of the CCR unit by Consolidation

Methods and Procedures

AP-1 will be dewatered sufficiently to remove the free and interstitial liquids in the pond to provide ease of CCR excavation, a stable base for the construction of the composite liner system, and for the consolidation of CCR.

AP-1 will be closed by consolidating the excavated CCR into an approximately 144-acre fully-contained engineered structure. The containment will include a base composite liner system beneath the entire approximately 144-acre consolidated footprint and a final cover system. In accordance with § 257.102(d), the final cover system will be constructed to control, minimize or eliminate, to the maximum extent feasible, post closure infiltration of liquids into the CCR and potential releases of CCR from the unit. This will be accomplished by providing sufficient grades and slopes to: 1) preclude the probability of future impoundment of water, slurry, or sediment; 2) ensure slope and cover system

stability; 3) minimize the need for further maintenance; and 4) be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.

The CCR will be excavated, at a minimum, to the interface of the CCR and the residual soils underlying AP-1, plus an additional 6 inches. Further excavation of the residuum will occur as needed to satisfy the foundation improvement requirements of the design. Once excavation and foundation improvements are complete within the consolidated footprint, compacted fill will be placed to improve the foundation and provide a stable subgrade for construction of the composite liner system. Once the liner system is installed, the lined area will be filled with appropriately conditioned and compacted CCR. This process will continue in a phased construction approach over the consolidated footprint.

Description of Composite Liner and Final Cover System

In accordance with § 257.71, the composite liner system for the consolidated footprint will consist of, from bottom to top, a prepared subgrade, either a 24-inch thick (minimum) layer of compacted clayey soil with a maximum hydraulic conductivity of 1×10^{-7} cm/s or a geosynthetic clay liner overlying a minimum 24-inch thick layer of compacted soil with a maximum hydraulic conductivity of 1×10^{-5} cm/s, a 60-mil thick HDPE geomembrane, a leachate collection and removal system consisting of a cushioning geotextile and/or double-sided drainage geocomposite and a 24-inch thick (minimum) sand/gravel drainage/protection layer.

The final cover system for the consolidated footprint will consist of a synthetic engineered turf (ClosureTurf®), which, at a minimum, will be designed to meet or exceed the requirements of § 257.102(d)(3)(ii) for an alternative cover system. The final design will ensure that the potential for disruption of the integrity of the final cover system is minimized through a design that accommodates settlement and subsidence, in addition to providing an erosion layer for protection from wind or water erosion.

§ 257.102(b)(1)(iv) – Estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit

AP-1 currently contains approximately 20,400,000 cubic yards of CCR. Future use of the unit will not substantially affect the written closure plan in effect.

§ 257.102(b)(1)(v) – Estimate of the largest area of the CCR unit ever requiring a final cover

Current configuration of AP-1 is approximately 254 acres in size. As stated above, the largest area ever requiring a final cover (i.e., consolidated footprint) is approximately 144 acres.

§ 257.102(b)(1)(vi) – Closure Schedule

The milestone tasks and the associated durations given below are initial estimates. Some of the activities associated with the milestone tasks will overlap. Durations reflect approximate time to implement closure instead of dates since there is not yet a specific date to initiate closure.

Estimated Milestones

State Agency coordination and permit acquisition – within 3 years

Dewatering for construction – 13 years

Excavation/grading and stabilization – 13.5 years

Installation of final cover system – 11 years

Estimate of Year in which all closure activities will be completed – 2035

Certification Statement 40 CFR § 257.102(b)(4)

Initial Written Closure Plan

Site Name / Address

Plant Bowen
317 Covered Bridge Rd. S.W.
Cartersville, GA 30120

Owner Name / Address

Georgia Power Company
241 Ralph McGill Blvd
Atlanta, GA 30308

CCR Unit

AP-1

I hereby certify that the written closure plan was prepared in accordance with the requirements of 40 CFR § 257.102, and that the final cover system will meet the requirements of § 257.102(d)(3).


Gary H. McWhorter
Licensed State of Georgia, #PE012687