CLOSURE PLAN FOR EXISTING CCR LANDFILL PLANT GORGAS CCR LANDFILL 40 CFR 257.102(b)

SITE INFORMATION

Site Name / Address

Plant Gorgas 460 Gorgas Road Parrish, Alabama 35580

Owner Name / Address

Alabama Power Company 600 North 18th Street Birmingham, AL 35203

CCR Unit

Plant Gorgas CCR Landfill (Cell 1 and Cell 2)

Closure Method

Close In-Place

CLOSURE PLAN DESCRIPTION

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

The Plant Gorgas CCR Landfill will be closed by leaving CCR in place. In accordance with § 257.102(b)(3), the written closure plan will be amended if there is a change in operation that would substantially affect the written closure plan in effect and/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 leaving CCR in place

Methods and Procedures

The Gorgas CCR Landfill consists of two cells (Cell 1 and Cell 2) constructed concurrently, with both cells constructed using a composite liner system comprised of 1 foot of compacted clay having a maximum hydraulic conductivity of 1 x 10^{-5} cm/sec, a geosynthetic clay liner (GCL), and 60 mil HDPE liner.

The Gorgas CCR Landfill is maintained in a dry state, such that drainage is unnecessary. The ash subgrade for the final cover of the CCR Landfill will be graded to create a stable subgrade for construction of the final cover system. In accordance with § 257.102(d), the final cover will be constructed to control, minimize or eliminate, to the maximum extent feasible, post closure infiltration of liquids into the waste and potential releases of CCR from the unit. This will be prevented 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.

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Description of Final Cover System

The final cover will be designed to minimize infiltration and erosion, and is currently designed to consist of a GCL overlain by a 60-mil HDPE liner and a double-sided geocomposite drainage layer covered with 12 inches of protective soil and 6 inches of topsoil. The cover system to be used meets or exceeds the requirements of 40 C.F.R. §257.102(d)(3)(ii) in that the permeability of the final cover system will be less than or equal to the permeability of the composite bottom liner system. Final design will ensure the 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

The Gorgas CCR Landfill has been designed with a capacity of about 700,000 cubic yards. This landfill has just recently become operational. 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

The Gorgas CCR Landfill area is about 18 acres in size. The final cover will be applied to the footprint of the CCR unit disposal cells.

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

The milestones and the associated timeframes are initial estimates. Some of the activities associated with the milestones will overlap. Milestones reflect approximate time to implement closure. The facility is still operational so the date to initiate closure has not yet been established; therefore, a reasonable estimate of the year of completing closure is not yet available. However, once closure is initiated it will take an estimated 18 months to complete all closure activities.

Milestones

Regulatory Interface – 6 months Grading and Stabilization – 3 months Installation of final cover – 9 months

Estimate of Year in which all closure activities will be completed – Approximately 18 months after initiation of closure.

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

Initial Written Closure Plan for a CCR Surface Impoundment or Landfill

Site Name / Address

Plant Gorgas 460 Gorgas Road Parrish, AL 35580

Owner Name / Address

Alabama Power Company 600 North 18th Street Birmingham, AL 35203

CCR Unit

Plant Gorgas CCR Landfill

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).

PROFESSIONAL

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