

**CLOSURE PLAN FOR EXISTING CCR SURFACE IMPOUNDMENT
PLANT GASTON GYPSUM POND
40 CFR 257.102(b)**

SITE INFORMATION

Site Name / Address

Plant Gaston
31972 Highway 25
PO Drawer 1127
Wilsonville, AL 35186-7114

Owner Name / Address

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

CCR Unit

Plant Gaston Gypsum Pond

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 Gaston Gypsum Pond will be closed by leaving CCR in place. The pond will be dewatered sufficiently to remove any free liquids present and to an extent needed to provide a stable base for the construction of the final cover system. 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

The Gypsum Pond was constructed with a composite liner system consisting of two feet of clay having a maximum hydraulic conductivity of 1×10^{-7} cm/sec overlain by a 60 mil HDPE geomembrane.

The gypsum surface serving as the subgrade for the final cover will be graded to create a stable subgrade for 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 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 system is currently designed to consist of a 60 mil HDPE geomembrane overlain by a drainage geocomposite, which will then be covered with a minimum 18-inch protective soil layer and a minimum 6-inch topsoil layer capable of sustaining vegetative growth. This final cover system will minimize infiltration and erosion and 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 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 Gypsum Pond is currently in operation and has a design capacity of approximately 1,980,000 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

The area of the existing Gypsum Pond is approximately 41 acres.

§ 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 instead of dates. Date to initiate closure not yet established as the facility is currently in operation and periodically has gypsum removed from it for beneficial reuse purposes. Thus, available capacity (which will influence closure dates) varies depending upon gypsum production and beneficial reuse operations; therefore, a reasonable estimate of the year of completing closure is not yet available. However, once closure is initiated it will take an estimated 24 months to complete all closure activities.

Estimated Milestone Durations

Regulatory interface – 6 months

Subgrade Grading & Preparation – 6 months

Installation of final cover – 1 year

Estimate of Year in which all closure activities will be completed - Approximately 2 years 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

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Plant Gaston
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Wilsonville, AL 35186-7114

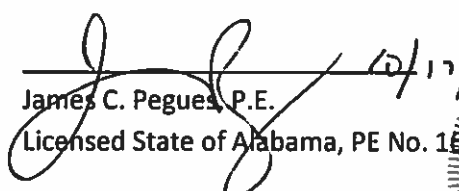
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CCR Unit

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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).

 10/17/11
James C. Pegues, P.E.
Licensed State of Alabama, PE No. 16516

