

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

SITE INFORMATION

Site Name / Address

Plant Barry
15300 Highway 43 North
Bucks, Alabama 36512

Owner Name / Address

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

CCR Unit

Plant Barry 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 Barry Gypsum Pond will be closed by leaving CCR in place in accordance with § 257.102(b)(3), as described further below. 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 Barry Gypsum Pond was designed and constructed with a 60-mil HDPE liner overlying 2 feet of compacted clay having a permeability of 1×10^{-6} cm/s. The pond will be dewatered sufficiently to remove the free liquids and to an extent to provide a stable base for the construction of the final cover system.

The gypsum subgrade for the final cover of the Gypsum Pond 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, 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.

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

Description of Final Cover System

The final cover system will be designed to minimize infiltration and erosion. The cover system to be used is currently being evaluated and final design is not yet complete. The final cover system, at a minimum, will be designed to meet or exceed the requirements of **40 C.F.R. §257.102(d)(3)(i) or (ii)** (traditional and alternative cover system) in that the permeability of the final cover system will be less than or equal to the permeability of the composite bottom liner system present beneath the surface impoundment, but no greater than 1×10^{-5} cm/sec. The final cover, at a minimum, will consist of an 18-in infiltration layer overlain by 6-in of soil capable of sustaining vegetative growth, or instead may consist of an alternate cover system utilizing low permeability geosynthetic materials. 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 Plant Barry Gypsum Pond was designed for a maximum capacity of 650,000 cubic yards of CCR. Future use of the unit will not substantially affect the written closure plan.

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

The Barry Gypsum Pond has an approximate storage area of about 19 acres. The final cover will be applied to the 19-acre footprint of the CCR unit.

§ 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 since there is no specific date to initiate closure. The facility is still operational, and serves not only as a disposal area but a reclaim area for beneficial reuse of gypsum. 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

Dewatering – 3 months

Grading and stabilization – 3 months

Installation of final cover – 6 months

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

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

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

Initial Written Closure Plan for a CCR Surface Impoundment or Landfill

Site Name / Address

Plant Barry
15300 Highway 43 North
Bucks, Alabama 36512

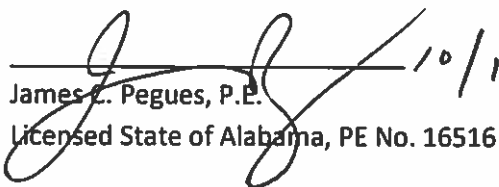
Owner Name / Address

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

CCR Unit

Plant Barry Gypsum Pond

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).


James C. Pegues, P.E.
Licensed State of Alabama, PE No. 16516

