CLOSURE PLAN FOR EXISTING CCR SURFACE IMPOUNDMENT PLANT CRIST GYPSUM STORAGE AREA 40 CFR 257.102(b)

SITE INFORMATION

Site Name / Address

Plant Crist 11999 Pate Street Pensacola, FL 32514

Owner Name / Address

Gulf Power Company One Energy Place Pensacola, FL 32520

CCR Unit

Plant Crist Gypsum Storage Area

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 Crist Gypsum Storage Area 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

The Gypsum Storage Area was constructed with a composite liner system consisting of a geosynthetic clay liner (GCL) having a maximum hydraulic conductivity of 1 x 10^{-9} 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 accomplished 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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The final cover system is currently designed to consist of an HDPE or LLDPE 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 will meet or exceed 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 Storage Area is currently in operation and has an initial design capacity of approximately 1,197,000 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 Storage Area is approximately 14 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. The closure completion date has not yet been established as the facility is currently in operation and periodically has gypsum removed from it for beneficial reuse purposes. Thus, available capacity varies depending upon gypsum production and beneficial reuse operations.

Estimated Milestone Durations

Regulatory Interface and Permitting – 6 months

Dewatering – 6 months

Subgrade Grading & Preparation – 6 months

Installation of final cover – 9 months

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

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Certification Statement 40 CFR § 257.102

Initial Written Closure Plan for a CCR Surface Impoundment or Landfill

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Owner Name / Address

Gulf Power Company One Energy Place Pensacola, FL 32520

CCR Unit

Plant Crist Gypsum Storage Area

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.V. Licerised State of Florida, PE No. 52519

3