

INITIAL WRITTEN CLOSURE PLAN
40 C.F.R. PART 257.102
PLANT WANSLEY COAL COMBUSTION BY-PRODUCT PRIVATE INDUSTRY SOLID WASTE DISPOSAL
FACILITY (PLANT WANSLEY GYPSUM LANDFILL)
GEORGIA POWER COMPANY

SITE INFORMATION

Site Name / Address

Plant Wansley
1371 Liberty Church Rd.
Carrollton, GA 30116

Owner Name / Address

Georgia Power Company
241 Ralph McGill Blvd
Atlanta, GA 30308

CCR Unit

Plant Wansley Gypsum Landfill

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 Wansley Gypsum Landfill, consisting of three permitted and constructed cells, will be closed by leaving CCR in place and installing a final cover system. In accordance with 40 C.F.R. Part § 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, 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 three cells of the landfill were permitted and constructed with a composite liner system consisting of, from bottom to top, a minimum 24-inch compacted clay layer with a maximum hydraulic conductivity of 1×10^{-5} cm/sec. overlain by a geosynthetic clay liner (GCL) with a maximum hydraulic conductivity of 5×10^{-9} cm/sec., followed by a 60 mil HDPE geomembrane, and a geocomposite drainage layer overlain with a minimum 24-inch thick sand drainage/protection layer (leachate collection & removal system).

The ash subgrade for the final cover in each cell will be graded to create a stable surface 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 ponding of storm water, sediment, or slurry; 2) ensure slope and cover system stability; 3) minimize the need for further maintenance; and, 4) be completed consistent with recognized and generally accepted good engineering practices.

Description of Final Cover System

The final cover system is currently permitted to consist of a GCL overlying the prepared subgrade overlain with a 60 mil HDPE geomembrane. A drainage geocomposite, overlying the HDPE geomembrane, will be covered with a minimum 18-inch protective soil layer and a minimum 6 – inch topsoil layer capable of sustaining vegetative growth. This system is currently being evaluated for removal of the GCL and therefore the final design is not yet complete. The 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 Plant Wansley landfill has an estimated capacity of approximately 6,720,600 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 total combined area of Cells 1, 2, and 3 is approximately 82 acres that would require final cover.

§ 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. Milestone durations reflect approximate time lengths, rather than specific dates, to implement closure activities. The closure completion date is based on current projected generation and disposal rates and is subject to change.

Estimated Milestone Durations

Subgrade Grading & Preparation – 4 months

Installation of final cover – 6 months

Estimate of Year in which all closure activities will be completed - 2024

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

Initial Written Closure Plan

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Carrollton, GA 30116

Owner Name / Address

Georgia Power Company
241 Ralph McGill Blvd
Atlanta, GA 30308

CCR Unit

Plant Wansley Gypsum 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).


Gary H. McWhorter 10/17/16
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H. McWHORTER