

INITIAL WRITTEN CLOSURE PLAN
40 C.F.R. PART 257.102
PLANT MCINTOSH COAL COMBUSTION BY-PRODUCT LANDFILL NO. 4
(LANDFILL 4)
GEORGIA POWER COMPANY

SITE INFORMATION

Site Name / Address

Plant McIntosh
981 Old Augusta Road Central
Rincon, GA 31326

Owner Name / Address

Georgia Power Company
241 Ralph McGill Blvd
Atlanta, GA 30308

CCR Unit

Plant McIntosh Landfill 4

- Cell 1, Cell 2A, and Future Cells 2B, 3, and 4

Closure Method

Close In-Place

CLOSURE PLAN DESCRIPTION

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

Plant McIntosh Landfill 4 consists of closed Cell 1, constructed Cell 2A, and future cells 2B, 3 and 4. Cell 1 was closed in place by consolidating the existing CCR waste into a smaller footprint and installing a final cover. Cell 2A and future cells will be closed in place by installing a 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 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

Cell 2A was permitted and constructed with a composite liner system consisting of a minimum 18-inches of compacted clay layer with a maximum hydraulic conductivity of 1×10^{-7} cm/sec. A 60-mil HDPE geomembrane overlies the clay layer. The liner system is completed with a geocomposite drainage layer with a minimum 24-inch thick sand drainage/protection layer (leachate collection & removal system).

The ash subgrade for the final cover of Cell 2A 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, sediment, or slurry; 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.

The final cover system will consist of a 60-mil HDPE geomembrane overlying the prepared subgrade. 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 final cover system will minimize infiltration and erosion and meets the requirements of 40 C.F.R. § 257.102(d)(3)(i) 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.

Future Cells 2B, 3, and 4 are permitted with the same composite liner and final cover systems. These cells will therefore follow the same construction and installation as that of Cell 2A (as stated above) for the future lined cell.

§ 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 McIntosh Landfill 4 has an estimated capacity of 3,830,200 cubic yards. 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 Plant McIntosh Landfill 4 has a combined area of approximately 62 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 dates, to implement closure. The closure completion date is based on current projected generation and disposal rates and is subject to change.

Cell 2A and Future Cell 2B Estimated Milestone Durations

Subgrade Grading & Preparation – 6 months per cell

Installation of final cover – 1 year per cell

Estimate of Year in which all closure activities will be completed – 2035

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

Initial Written Closure Plan

Site Name / Address

Plant McIntosh
981 Old Augusta Road Central
Rincon, GA 31326

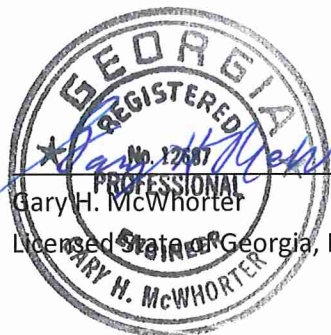
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CCR Unit

Plant McIntosh Landfill 4

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).


No. 12687
PROFESSIONAL
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10/17/16