PERIODIC STRUCTURAL STABILITY ASSESSMENT
391-3-4-.10(4) AND 40 C.F.R. PART 257.73(d)
PLANT MCDONOUGH ASH POND 3 (AP-3) AND ASH POND 4 (AP-4)
GEORGIA POWER COMPANY

The Federal CCR Rule and the Georgia CCR Rule (391-3-4-.10) require the owner or operator of an existing CCR surface impoundment to conduct initial and periodic structural stability assessments. A direct final rule revision to a partial vacatur of the Final Rule became effective on October 4, 2016. This revision eliminated the exemption for inactive CCR surface impoundments and required such units to meet the same requirements as existing CCR surface impoundments. The owner or operator must document whether the design, construction, operation and maintenance of the CCR unit is consistent with generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein. *See* 40 C.F.R. § 257.73(d); Ga. Comp. R. & Regs. r. 391.3-4-.10(4)(b)[1]. In addition, the Rules require a subsequent assessment be performed within 5 years of the previous assessment. *See* 40 C.F.R. § 257.73(f)(3); Ga. Comp. R. & Regs. r. 391.3-4-.10(4)(b) [1].

The CCR surface impoundments known as Ash Pond 3 (AP-3) and Ash Pond 4 (AP-4), owned, and operated by Georgia Power Company, are located at Plant McDonough-Atkinson (Plant McDonough) in Cobb County, Georgia. These units no longer receive CCR or other waste streams and no longer functions as a CCR surface impoundment. At the time of this submittal, AP-3 and AP-4 are being consolidated and closed in place as combined unit AP-3/4 in accordance with §257.102(d) and are in the process of obtaining a solid waste permit under the Georgia Rules for Solid Waste Management, 391-3-4-.10.

AP-3 and AP-4 are located in the Piedmont geologic region, characterized by igneous and metamorphic rock. In general, underlying rock at the facility consists of schist and gneiss. The depth to rock surface varies across the site, but rock is generally encountered 20 to 60 feet below ground surface.

The embankments of AP-3 and AP-4 are formed by perimeter dikes consisting of locally borrowed, compacted, residual soils. The subsurface near the perimeter berms of AP-3 and AP-4 consists of the following major layers:

- Alluvial deposits (below parts of embankment)
- Residuum soils
- Saprolite soils
- Partially weathered rock (PWR)
- Schist and Gneiss bedrock

The embankments at AP-3 and AP-4 were properly constructed and compacted to a density capable of withstanding the range of loading conditions evaluated for the interim condition.

In the interim stage of construction, water is managed through a system of three temporary detention ponds that attenuate or retain stormwater during the construction process at the northwest, south, and within the AP-4

[1] In a typographical error, 391.3-4.10(4)(b) references the "structural integrity criteria in 40 CFR 247.73," when the reference to such criteria should be 40 CFR 257.73.

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boundaries. Under these conditions and along with the use of pumps during the construction process, runoff during storm events enters the storage volume within the temporary pond in AP-4 (temporary pond B), or is discharged via the facility's NPDES program when entering Stormwater Detention Ponds 1 or 3.

Embankment slopes and cover system components effectively meet the requirements of 40 C.F.R. § 257.73(d). Downstream embankment slopes are vegetated and well maintained. Upstream embankment slopes are covered utilizing a ClosureTurf® engineered cover system, consisting of synthetic turf and sand infill, or HydroBinder® infill application. Downslope and perimeter channels consist of armoring with HydroBinder®, rip rap, or armored with articulated concrete block for surface water conveyance. The upstream and downstream embankment slopes are not subject to wave action or rapid drawdown.

I certify that the structural stability assessment for AP-3 and AP-4 was conducted in accordance with 40 C.F.R. § 257.73(d).

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