

PERIODIC STRUCTURAL STABILITY ASSESSMENT
391-3-4-.10(4) and 40 C.F.R. Part 257.73
PLANT HAMMOND ASH POND 1 (AP-1)
GEORGIA POWER COMPANY

The Federal CCR Rule, and, for Existing Surface Impoundments where applicable, 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. The owner or operator must conduct an assessment of the CCR unit and document whether the design, construction, operation and maintenance of the CCR unit is consistent with recognized and 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. 40 C.F.R. § 257.73(f)(3); *See* Ga. Comp. R. & Regs. r. 391.3-4-.10(4)(b)¹.

The CCR surface impoundment known as Plant Hammond AP-1 is located on Plant Hammond property in Coosa, Georgia, approximately 1 mile west of the Rome, Georgia city limits in Floyd County. The Notification of Intent to Initiate Closure was placed in the Operating Record on 8/31/2020 and closure has been designed to have no negative impacts on the stability of the perimeter embankment.

AP-1 is formed by an engineered perimeter earth embankment. The stable embankment foundation generally consists of sandy clays of low plasticity.

Riprap has been placed on the upstream slopes (inboard) to protect against potential wave action and surface erosion. South and east downstream slopes (outboard) are well vegetated. A plant road is on the northern edge of the pond and the plant is located to the west of the pond. The pond is not operated in such a manner as to normally be subjected to rapid drawdown conditions. However, historic stability analyses have been conducted for such conditions. These analyses have indicated that the slopes are stable for rapid drawdown under current slope conditions. Furthermore, the riprap placed on the inboard slopes provides protection against erosion from rapid drawdown.

^[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.

The perimeter earth embankment has been properly constructed using mechanical stabilization and compacted to a density sufficient to withstand the range of anticipated loading conditions.

Vegetated slopes of the dike are properly maintained to a manageable height that allows for routine visual inspections.

The principal spillway for AP-1 is located on the western edge of AP-1 and consists of a 36-inch diameter fiberglass reinforced pipe (FRP). The 36-inch FRP extends from a reinforced concrete intake structure into the Plant for process water return flows or blowdown to the river through the Plant's discharge tunnel. The auxiliary spillway for AP-1 is located in the southwestern corner of the pond and consists of a 3'-8" by 3'-8" (interior dimension) reinforced concrete riser structure 18 ft. tall with stop logs. The riser is connected to a 36-inch diameter reinforced concrete pipe (RCP) which remains closed during normal operations. The discharge pipe discharges into a small pool which is connected to the Coosa River. The original auxiliary spillway, located in the northeastern corner of the pond, has been grouted and abandoned.

The spillways are designed, constructed, operated, and maintained to adequately manage flow during and following the peak discharge from the 24-hour, 1,000-year flood.

A review of current conditions indicates the downstream slopes of the embankment are subject to inundation from the 100-year flood of the Coosa River. The downstream slopes are well vegetated and have not been impacted from past floods. The FEMA base flood elevation is El. 586, and the top of the dike was constructed to El. 590. The flood plain is wide and flat and should not have significant erosion velocities.

I hereby certify that the structural stability assessment was conducted in accordance with 40 C.F.R. §257.73(d).


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