

**INITIAL STRUCTURAL STABILITY ASSESSMENT
PLANT SMITH ASH POND
GULF POWER COMPANY**

EPA's "Disposal of Coal Combustion Residuals from Electric Utilities Final Rule (40 C.F.R. Part 257 and Part 261) subsection §257.73(d) requires the owner or operator of an existing CCR surface impoundment to conduct periodic structural stability assessments. The owner or operator must 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.

The CCR surface impoundment located at Gulf Power Company's Plant Smith, referred to as the Plant Smith Ash Pond, is located on the Plant Smith property in Southport, Florida. The CCR surface impoundment is formed by an embankment system comprised of both incised and dike configurations. The embankment foundation soils generally consist of stable loose to medium dense sands and silty sands.

Slope protection against surface erosion consists of grassy vegetation on the interior dikes, with grassy vegetation and some riprap and gravel on the exterior slopes. Wave action is not a concern at this site due to internal divider dikes that limit the width and length of free water sections of the impoundment. The pond is not operated in such a manner as to normally be subjected to rapid drawdown conditions, but the grassy vegetation will provide protection against erosion this such an event.

The perimeter embankments have been constructed using mechanically placed material that has been compacted to a density sufficient to withstand the range of loading conditions. The vegetated slopes of the dike are properly maintained to a manageable height to allow for periodic inspection.

The discharge structure for the impoundment is a concrete overflow weir. There are no discharge pipes that penetrate through the perimeter embankments. The water levels within in the pond are maintained such that there is sufficient storage to adequately manage inflow during and following the 100-yr design storm.

There is a low probability of inundation of the downstream slopes of the embankment due to surge from tropical storms. Recent analyses of storm surge for this coastal region indicates storm surge greater than 2 feet occurs less than 1 percent of the time. The embankment is protected from erosion in the event of inundation by the vegetative cover and the natural vegetation at the downstream toe of the embankment.

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


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