

**PERIODIC STRUCTURAL STABILITY ASSESSMENT  
PLANT BARRY GYPSUM POND  
ALABAMA POWER COMPANY**

EPA's "Disposal of Coal Combustion Residuals from Electric Utilities Final Rule (40 C.F.R. Part 257 and Part 261) and the State of Alabama's ADEM Admin. Code Chapter 335-13-15 require the owner or operator of an existing CCR surface impoundment to conduct periodic structural stability assessments. Per §257.73(d) and ADEM Admin. Code r. 335-13-15-.04(4)(d) 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. In addition, §257.73(f)(3) and ADEM Admin. Code r. 335-13-15-.04(4)(f)3. require a subsequent assessment be performed within 5 years of the previous assessment.

The CCR surface impoundment located at Alabama Power Company's Plant Barry that is also referred to as the Plant Barry Gypsum Pond, is located on Plant Barry property, near Bucks, Alabama. The lined CCR surface impoundment is formed by an engineered perimeter embankment. The foundations generally consist of stable and competent medium stiff to stiff clays and medium dense clayey sands.

Slope protection against surface erosion consists of HDPE liner on the interior of the surface impoundment, and grassy vegetation on the exterior slopes. Wave action is not a concern at this site due to the presence of the HDPE liner. The pond is not operated in such a manner as to normally be subjected to rapid drawdown conditions, and the presence of the liner prevents adverse effects from a potential rapid drawdown condition.

The perimeter embankments have been properly constructed using mechanical stabilization, compacted to a density sufficient to withstand the range of loading conditions.

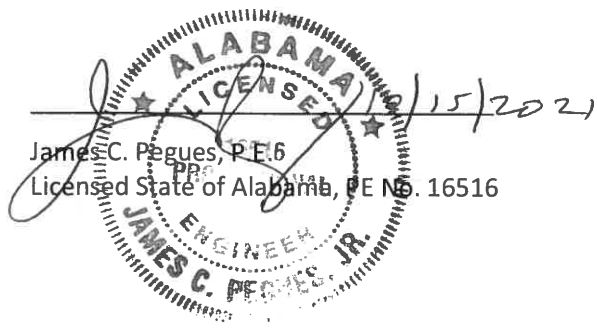
Vegetated slopes of the dike are properly maintained to a manageable height to allow for periodic inspection.

The primary spillway is constructed of a 36-in diameter HDPE outlet pipe leading from a concrete riser structure. The spillway is designed, constructed, operated and maintained to adequately manage flow during and following the peak discharge from the 1,000-yr storm.

The primary spillway discharge structure passes through the base of the embankment. The pipe is constructed of HDPE and is free of deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the structure.

The downstream slopes of the embankment are not subject to inundation from adjacent water bodies.

I hereby certify that the structural stability assessment was conducted in accordance with 40 C.F.R. §257.73(d) and ADEM Admin. Code r. 335-13-15-.04(4)(d).

  
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