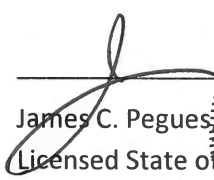


LOCATION RESTRICTION DEMONSTRATION
UNSTABLE AREAS (40 C.F.R. 257.64 and ADEM Admin. Code r. 335-13-15-.03(5))
PLANT GORGAS GYPSUM LANDFILL
ALABAMA POWER COMPANY

EPA's "Disposal of Coal Combustion Residuals from Electric Utilities" Final Rule (40 C.F.R. Part 257, Subpart D) 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 make a demonstration that the facility meets certain location restrictions. Per § 257.64 and ADEM Admin. Code r. 335-13-15-.03(5), the owner or operator must demonstrate that the facility is not located within an unstable area; otherwise, a demonstration must be made that recognized and generally accepted good engineering practices have been incorporated into the design of the CCR unit to ensure that the integrity of the structural components of the CCR unit will not be disrupted. An unstable area is defined in the regulations as a location that is susceptible to natural or human induced events or forces capable of impairing the integrity, including structural components of some or all of the CCR unit that are responsible for preventing releases from such unit. Unstable areas can include poor foundation conditions, areas susceptible to mass movements and karst terrains.

The CCR landfill located at Alabama Power Company's Plant Gorgas, referred to as the Plant Gorgas Gypsum Landfill, is located on Plant Gorgas property, near Parrish, Walker County, Alabama. The lined CCR landfill is formed by excavations in previously placed mine spoil material as well as the construction of earthen embankments. The embankments have been properly constructed using mechanical stabilization, compacted to a density sufficient to withstand the range of loading conditions. Factor of safety assessments have indicated that the embankments meet the generally accepted minimum factors of safety. The foundations beneath the embankments and the CCR unit generally consist of previously placed mine spoils. Calculations at the time of original design and permitting for the adjoining CCR Landfill documented that strains in the liner due to consolidation of the underlying mine spoil would be on the order of 1.7 percent, well within the manufacturer's tolerable strain limit of 4 percent. The CCR Landfill calculation assumed mine spoil depths of up to 125 feet. The mine spoil depths beneath the Gypsum Landfill were determined to be less than 100 feet. Therefore, the calculation for the CCR Landfill is applicable for the Gypsum Landfill, as less thickness of mine spoil would result in less settlement, and therefore less strain. Furthermore, the CCR unit is not located within karst terrain, and the site and its surrounding areas are not subject to mass movements (e.g. landslides).

I hereby certify that the unstable area location restriction demonstration was conducted in accordance with 40 C.F.R. Part 257.64 and ADEM Admin. Code r. 335-13-15-.03(5).


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