

Design Criteria Certification 257.70(e)
Composite Liner and Leachate Collection System
CCR LANDFILL: Independence Steam Electric Station
CCR UNIT: Cells 16 through 22

Promus Engineering, LLC ("Consultant") has been retained by Entergy Arkansas, LLC (Entergy) to assess the design of the composite liner and leachate collection and removal system of the above-referenced coal combustion residuals (CCR) landfill units and determine if the design criteria meet the requirements of 40 CFR § 257.70. The following paragraphs present the background, assessment, limitations, and certification.

1.0 BACKGROUND

Pursuant to 40 CFR § 257.70(a)(1), new CCR landfills, existing and new CCR surface impoundments, and all lateral expansion of a CCR landfill must be designed, constructed, operated, and maintained with either a composite liner or an alternative composite liner and a leachate collection and removal system. Pursuant to 40 CFR § 257.70(e), prior to construction of the CCR landfill, the owner or operator must obtain a certification from a qualified professional engineer that the design of the composite liner (or, if applicable, alternative composite liner) and the leachate collection and removal system meet the following requirements:

- i. A composite liner that meets the requirements of 40 CFR § 257.70(b); or
- ii. An alternative composite liner that meets the requirements of 40 CFR § 257.70(c); and
- iii. A leachate collection and removal system that meets the requirements of 40 CFR § 257.70(d).

In support of the assessment, Consultant completed a desktop evaluation of the composite liner and leachate collection and removal system design.

2.0 ASSESSMENT

Based on a review of the applicable information, Consultant concludes:

CCR Unit	Composite Liner System	Leachate Collection and Removal System
Cells 16 through 22	Composite Liner meets the requirements of 40 C.F.R. § 257.70(c)	Leachate Collection and Removal System meet the requirements of 40 C.F.R. § 257.70(d)

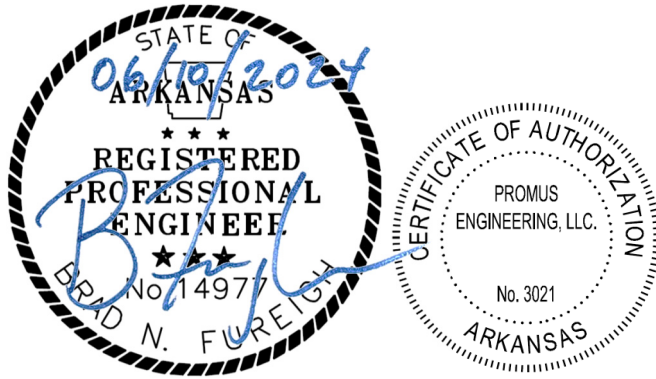
3.0 LIMITATIONS

The signature of Consultant's authorized representative on this document represents that, to the best of Consultant's knowledge, information, and belief in the exercise of its professional judgment, the information presented herein is accurate as of the date of such signature. Any opinion or decisions by Consultant are based on Consultant's experience, qualifications, and professional judgment and are not to be construed as warranties or guarantees. Opinions relating to environmental, geologic, and geotechnical conditions, or other estimates, are based on available data, and actual conditions may differ from those encountered at the times and locations where data were obtained, despite the use of due care.



4.0 CERTIFICATION

I, Brad N. Fureigh, PE, of Promus Engineering, LLC (Promus), being a Registered Professional Engineer in the State of Arkansas, do hereby certify, to the best of my knowledge, information, and belief, that the CCR unit that is the subject of this report, dated June 10, 2024, meets the requirements for the design of the Composite Liner and Leachate Collection and Removal System pursuant to 40 C.F.R. § 257.70, and that this report is true and correct and has been prepared in accordance with generally accepted good engineering practices.



Brad N. Fureigh, PE
AR Registered Professional Engineer No.: 14977

June 10, 2024

Date

