

# **PLACEMENT ABOVE THE UPPERMOST AQUIFER**

## **CCR LANDFILL: Independence Steam Electric Station**

### **CCR UNIT: Cell 16**

Promus Engineering, LLC ("Consultant") has been retained by Entergy Arkansas, LLC (Entergy) to prepare the following assessment of whether the above-referenced coal combustion residuals ("CCR") landfill unit meets the requirements for placement above the uppermost aquifer set out in 40 C.F.R. § 257.60(a). Presented below are the project background, summary of findings, limitations, and certification.

## **1.0 BACKGROUND**

Pursuant to 40 C.F.R. § 257.60(a), new CCR landfills, existing and new CCR surface impoundments, and any lateral expansions of a CCR unit must be constructed with a base that is located no less than 1.52 meters (five feet) above the upper limit of the uppermost aquifer, or must demonstrate that there will not be an intermittent, recurring, or sustained hydraulic connection between any portion of the base of the CCR unit and the uppermost aquifer due to normal fluctuations in groundwater elevations (including the seasonal high water table).

Pursuant to 40 C.F.R. § 257.60(b) and (c)(2), for new CCR landfills and lateral expansions of CCR units, no later than the date of initial receipt of CCR in the CCR unit, the owner or operator must obtain a certification from a qualified professional engineer stating that the owner or operator has demonstrated that the CCR unit meets the requirements for placement above the uppermost aquifer.

In support of Consultant's assessment, Consultant completed a desktop evaluation of the location restriction for placement above the uppermost aquifer and determined that sufficient information is available to document the required demonstration.

## **2.0 ASSESSMENT**

Based on a review of the approved permit drawings and the Groundwater Sampling and Analysis Plan (approved by DEQ as part of the 2014 Permit Modification, DIN 66575), Promus Engineering, LLC performed a desktop evaluation of the location restriction for placement above the uppermost aquifer.

The evaluation considered the base elevation of Cell 16 relative to groundwater elevations, including seasonal high water table conditions. Available data indicates that the base of the CCR unit is separated from the uppermost aquifer by a minimum of five feet or that no hydraulic connection exists under normal or seasonal conditions.

Therefore, based on this evaluation, Consultant concludes as follows:

| <b>CCR Unit</b> | <b>Placement above the uppermost aquifer</b>    |
|-----------------|-------------------------------------------------|
| Cell 16         | Meets the requirements of 40 C.F.R. § 257.60(a) |

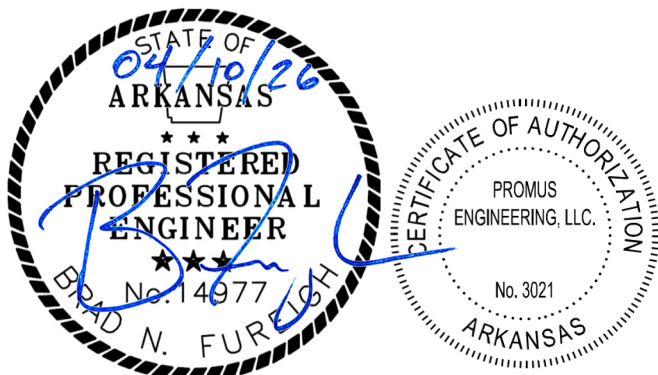


### 3.0 LIMITATIONS

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 April 10, 2026 meets the requirements for placement above the uppermost aquifer pursuant to 40 C.F.R. § 257.60(a), and that this report is true and correct and has been prepared in accordance with generally accepted good engineering practices.



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

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April 10, 2026

Date

