

**UNSTABLE AREAS
CCR SURFACE IMPOUNDMENT: A.B. BROWN STATION
CCR UNIT: ASH POND**

AECOM (“Consultant”) has been retained by Vectren to prepare the following assessment of whether the above-referenced existing coal combustion residuals (“CCR”) surface impoundment meets the location restriction for unstable areas requirements set out in 40 C.F.R. § 257.64(a). Presented below are the project background, summary of findings, limitations, and certification.

1.0 BACKGROUND

Pursuant to 40 C.F.R. § 257.64(a), an existing or new CCR landfill, existing or new CCR surface impoundment, or any lateral expansion of a CCR unit must not be located in an unstable area unless the owner or operator demonstrates 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. Pursuant to 40 C.F.R. § 257.64(b), the owner or operator must consider all of the following factors, at a minimum, when determining whether an area is unstable:

- 1) On-site or local soil conditions that may result in significant differential settling;
- 2) On-site or local geologic or geomorphologic features; and
- 3) On-site or local human-made features or events (both surface and subsurface).

Pursuant to 40 C.F.R. § 257.64(c) and (d)(1), for an existing surface impoundment, 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 unstable areas no later than October 17, 2018.

In support of Consultant’s assessment, Consultant completed a desktop evaluation of the location of the CCR unit and determined that sufficient information is available to document the required unstable areas location demonstration.

2.0 ASSESSMENT

Based upon a review of available geologic mapping, historical information and geotechnical explorations by AECOM and other consultants, Consultant concludes as follows:

CCR Unit	Unstable areas
Ash Pond	<i>Meets the requirements of 40 C.F.R. § 257.64(a)</i>

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, it is Consultant’s professional opinion that the aforementioned information is accurate as of the date of such signature. Any opinion or decisions by Consultant are made on the basis of Consultant’s experience, qualifications, and professional judgment and are not to be construed as warranties or guaranties. In addition, opinions relating to environmental, geologic, and geotechnical conditions or other estimates are based on available data, and actual conditions may vary from those encountered at the times and locations where data are obtained, despite the use of due care.

4.0 CERTIFICATION

I, Jay Mokotoff, being a Registered Professional Engineer, in accordance with the Indiana Professional Engineer’s Registration, do hereby certify to the best of my knowledge, information, and belief, that the CCR unit that is the subject of this report dated October 16, 2018 meets the location restriction for unstable areas requirements pursuant to 40 C.F.R. § 257.64(a), and that this report is true and correct and has been prepared in accordance with generally accepted good engineering practices.

SIGNATURE Jay D. Mokotoff



DATE 10/16/18