

**ENGINEER'S CERTIFICATION OF LINER DOCUMENTATION  
CCR SURFACE IMPOUNDMENT: RAWHIDE ENERGY STATION  
CCR UNIT: BOTTOM ASH TRANSFER IMPOUNDMENTS**

AECOM ("Consultant") has been retained by Platte River Power Authority to prepare a demonstration of the liner present at the Bottom Ash Transfer (BAT) Impoundments pursuant to 40 C.F.R. § 257.71(a)(1) of the Coal Combustion Residual (CCR) Rule. Presented below are the project background, summary of findings, limitations, and certification.

**1.0 BACKGROUND**

Pursuant to 40 C.F.R. § 257.71(a)(1) the owner or operator of an existing CCR surface impoundment must document whether or not such unit was constructed with any one of the following: (i) A liner consisting of a minimum of two feet of compacted soil with a hydraulic conductivity of no more than  $1 \times 10^{-7}$  cm/sec; (ii) a composite liner that meets the requirements of § 257.70(b); or (iii) An alternative composite liner that meets the requirements of § 257.70(c).

The BAT Impoundments were constructed in the early 1980s by excavating below grade into the Pierre Shale formation and lining the base with 18 inches of clay. Quality assurance data for this 18-inch clay layer is not available.

**2.0 SUMMARY OF FINDINGS**

The documented clay liner for the BAT surface impoundment does not meet the requirements established in 40 C.F.R. § 257.71; and therefore, does not satisfy the criteria of meeting the liner requirements to yield a status of lined surface impoundment. These BAT Impoundments are scheduled to be closed in accordance with the BAT Impoundment Closure Plan – Revision 1 dated May 2019.

**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, Sherry Bugg, being a Registered Professional Engineer, in accordance with the Colorado Professional Engineer's Registration, do hereby certify to the best of my knowledge, information, and belief, that the CCR units (BAT impoundments) do not meet the requirements of 40 CFR § 257.71(a), for demonstration of a lined surface impoundment.

SIGNATURE



DATE 09/13/2019

