

CCR Certification Report:  
Liner Design Criteria Evaluation

For

Ash Basin A

At Brayton Point Power Station

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## 1 INTRODUCTION

The purpose of this liner design criteria evaluation is to document that the requirements specified in 40 CFR §257.71(a)(1) have been evaluated to support the liner certification for Ash Basin A at the Brayton Point Power Station, an existing CCR surface impoundment as defined under 40 CFR §257.53.

Owners or operators of existing CCR surface impoundments must document, by October 17, 2016, whether or not such units were constructed with a liner meeting any one of the following criteria as defined in 40 CFR §257.71(a)(1):

- (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).

In accordance with §257.71(a)(3), if the CCR unit was not constructed with a liner that meets the requirements of §257.71(a)(1)(i), (ii) or (iii) as listed above, it will be considered an existing unlined CCR surface impoundment.

## 2 LINER EVALUATION

Based on the evaluation of design drawings and available construction records, Ash Basin A was constructed with a liner approximately 2 feet in thickness. A 20-mil PVC geomembrane was placed within the basin and was covered by 1-foot of select fill. A layer of filter fabric was then placed over the select fill at select locations followed by a 1-foot stone blanket layer. However, no permeability requirement was specified and construction records were not available to determine the in-situ hydraulic conductivity. Therefore, the Ash Basin A at Brayton Point Power Station cannot be certified as meeting the minimum criteria specified in §257.71(a)(1) for a lined impoundment.

## 3 CONCLUSION

Ash Basin A at the Brayton Point Power Station was evaluated relative to the USEPA CCR Rule requirements for liner certification for existing CCR surface impoundments (§257.71(a)(1)). Based on the evaluation presented herein, Ash Basin A was not constructed with a liner that meets the design criteria specified in §257.71(a)(1).

## 4 CERTIFICATION

### Certification Statement 40 CFR § 257.71(b) – Liner Design Criteria for an Existing CCR Surface Impoundment

**CCR Unit:** Brayton Point Ash Basin A

I, Katherine Scancarello, being a Registered Professional Engineer in good standing in the Commonwealth of Massachusetts, do hereby certify, to the best of my knowledge, information, and belief, that the information contained in this certification has been prepared in accordance with the accepted practice of engineering. I certify, for the above-referenced CCR Unit, that the documentation as to whether the CCR Unit meets the requirements of 40 CFR § 257.71(a) is accurate.

*Katherine Scancarello*

Printed Name

*10/13/2016*

Date



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