



Stantec Consulting Services Inc.  
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Revision 0

**Initial Hazard Potential Classification Assessment**  
**EPA Final CCR Rule**  
**Ash Pond**  
**Edwards Power Station**  
**Peoria County, Illinois**

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**1.0 PURPOSE**

This report documents Stantec's certification of the initial hazard potential classification assessment for the Edwards Power Station Ash Pond.

40 CFR 257.73(a)(2) requires the owner or operator of an existing CCR surface impoundment to conduct an initial hazard potential classification assessment and document the hazard potential classification, and the basis for the classification, of the CCR unit as either a high hazard potential CCR surface impoundment, a significant hazard potential CCR surface impoundment, or a low hazard potential CCR surface impoundment.

**2.0 FINDINGS**

A breach analysis was performed to evaluate potential hazards associated with a failure of the Ash Pond perimeter containment dike. The breach analysis involved transferring stored volumes within the Ash Pond for various scenarios to evaluate potential impacts to downstream areas. Breaches were evaluated at two different scenarios: 1) pond elevation at embankment crest, and 2) peak elevation produced by the Probable Maximum Precipitation (PMP) storm event. Two breach locations were selected at the southeast and southwest embankments of the Ash Pond due to potentially impacted features along their anticipated breach flow paths.

Results from the breach analysis indicate that multiple areas, including two mobile homes, to the west and south of the Ash Pond may be impacted by a failure of the Ash Pond's perimeter dike. Due to resultant breach flood depths at these locations, it was concluded that a failure of the Ash Pond's perimeter dike will probably cause loss of human life.

40 CFR 257.53 defines a "high hazard potential CCR surface impoundment" as a diked surface impoundment where failure or mis-operation will probably cause loss of human life.

Based on the results of the analysis summarized above, the Ash Pond was assigned a High hazard potential classification per 40 CFR 257.53.

**3.0 QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION**

I, Matthew Hoy, being a Professional Engineer in good standing in the State of Illinois, do hereby certify, to the best of my knowledge, information, and belief that;

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1. the information contained in this report and the underlying data in the operating record was prepared in accordance with the accepted practice of engineering and is accurate as of the date of my signature below; and
2. the initial hazard potential classification assessment for the Edwards Power Station Ash Pond was conducted in accordance with the requirements specified in 40 CFR 257.73.

SIGNATURE  DATE 10/12/2016

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