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Revision 0

Initial Hazard Potential Classification Assessment
EPA Final CCR Rule
Basin A
Miami Fort Power Station
Hamilton County, Ohio

1.0 PURPOSE

This report documents Stantec's certification of the initial hazard potential classification assessment for the Miami Fort Power Station Basin A.

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 Basin A perimeter containment dike. Breach failure scenarios were assessed around the circumference of the perimeter dike and modeled at one location. Breach locations were selected based on locations of nearby downstream plant and transportation infrastructure. Breach scenarios were simulated using water volumes corresponding to the maximum water surface elevation calculated within Basin A during a Sunny Day Breach, the 100-Year Storm Event, and the Probable Maximum Precipitation (PMP) storm event.

Analyses indicate that a potential breach of Basin A results in depths less than two feet and velocities less than or equal to five feet per second impacting plant and transportation infrastructure. The analyses indicate that a failure of Basin A's east embankment would primarily affect Miami Fort Power Station plant area. Based on the relatively low resultant maximum depths and velocities indicated in the breach analyses, it was concluded that a failure at certain locations along Basin A's perimeter dike would not result in probable loss of human life. However, it is anticipated that a breach of the containment dike could result in the release of CCR materials into downstream areas and waterways which can cause environmental damage.

40 CFR 257.53 defines a "significant hazard potential CCR surface impoundment" as a diked surface impoundment where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns.



Based on the results of the analysis summarized above, the Basin A was assigned a Significant hazard potential classification per 40 CFR 257.53.

3.0 QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

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

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 Miami Fort Power Station Basin A was conducted in accordance with the requirements specified in 40 CFR 257.73.

SIGNATURE David T. Hayson

DATE 10/12/16

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Design with community in mind