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Revision 0

Initial Hazard Potential Classification Assessment
EPA Final CCR Rule
Basin B
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 B.

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 visual analysis was performed to evaluate potential hazards associated with a failure of the Basin B perimeter containment dike. Failure scenarios were considered along the circumference of the perimeter dike and specifically at four locations. These four locations are located at the east, south, west, and north embankments of the perimeter dike. A breach failure scenario of the dike embankment at the four locations was evaluated for potential downstream impacts to structures, infrastructure, frequently occupied facilities/areas, and waterways. Potential for impacts was evaluated by determining probable breach flow paths using available elevation data and imagery of the impoundment along with the surrounding area.

Per analysis findings, it was found that a breach of the north and west embankments would be conveyed to the Great Miami River. A breach of the south embankment would be conveyed to the Ohio River. Based on the size of these receiving rivers relative to the breach volumes, the impacts on water surface elevations are likely not significant. A breach along the south side of the eastern dike would compromise the common dike between Basin A and Basin B, which would result in flow being exchanged between the two basins. If a second, compound breach would occur, the impact would be similar to a breach along the southern, western, or northern dikes of Basin B. It was concluded that a failure of the Basin B containment dike will result in no 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 B 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 B 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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