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Initial Hazard Potential Classification Assessment
EPA Final CCR Rule
East Ash Pond
Hennepin Power Station
Putnam County, Illinois

1.0 PURPOSE

This report documents Stantec's certification of the initial hazard potential classification assessment for the Hennepin Power Station East 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 visual analysis was performed to evaluate potential hazards associated with a failure of the East Ash Pond perimeter containment dike. Failure scenarios were considered along the perimeter dike and specifically at two locations. These two locations are located at the east and northeast embankments of the perimeter dike. The remainder of the impoundment is bordered by higher ground, so it is unlikely that a breach would occur in this direction. A breach failure of the dike at the two 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 and nearby area.

The analysis indicated that none of the breach scenarios appear to impact structures. A breach of the east embankment could impact an intermittently-used access road to the power station and East Polishing Pond, and a breach to the northeast could impact Leachate Pond. Both receiving ponds are on-site. A breach failure of the containment dike would not likely result in probable loss of human life. However, breach of the impoundment could cause stored CCR materials to be released into the Illinois River, which can cause environmental damage to downstream areas.

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.

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Based on the results of the analysis summarized above, East Ash Pond was assigned a Significant 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;

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 Hennepin Power Station East Ash Pond was conducted in accordance with the requirements specified in 40 CFR 257.73.

SIGNATURE

DATE

10/12/2016

ADDRESS:

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