aes Indiana

Eagle Valley Generating Station

2026 CCR Surface Impoundment Hazard Potential Classification Assessment

Revision 0

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Issue Purpose: For Use

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1.0 PURPOSE

AES Indiana's Eagle Valley Generating Station ("Eagle Valley" or the "Station") has three existing coal combustion residual (CCR) surface impoundments, Ponds A, B, and C, that are regulated by the U.S. Environmental Protection Agency's "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments," 40 CFR Part 257 Subpart D, also referred to herein as the Federal CCR Rule. In accordance with 40 CFR 257.73(a)(2), this report documents the 2026 hazard potential classification assessment for Ponds A, B, and C at Eagle Valley. Pursuant to 40 CFR 257.73(f), this hazard potential classification assessment was conducted and completed within five years of the previous assessment, dated October 5, 2021.

2.0 APPLICABLE FEDERAL CCR RULE REGULATION

The 2026 hazard potential classifications for Ponds A, B, and C are determined in accordance with the following excerpt from 40 CFR 257.53:

> *Hazard potential classification* means the possible adverse incremental consequences that result from the release of water or stored contents due to failure of the diked CCR surface impoundment or mis-operation of the diked CCR surface impoundment or its appurtenances. The hazardous potential classifications include high hazard potential CCR surface impoundment, significant hazard potential CCR surface impoundment, and low hazard potential CCR surface impoundment, which terms mean:
>
> (1) *High hazard potential CCR surface impoundment* means a diked surface impoundment where failure or mis-operation will probably cause loss of human life.
>
> (2) *Low hazard potential CCR surface impoundment* means a diked surface impoundment where failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the surface impoundment owner's property.
>
> (3) *Significant hazard potential CCR surface impoundment* means 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.

3.0 ASSESSMENT

The bases of the 2021 hazard potential classifications for Ponds A, B, and C as documented within the 2021 hazard potential classification assessment are reviewed to determine if any changes have occurred since 2021. Identified changes are then evaluated to determine if the ponds' previous hazard potential

classifications warrant an adjustment. Where no changes are noted for a given input, or where identified changes are determined to have no impact to the results and conclusions of the 2021 hazard potential classification assessment, the previous evaluation of that input is considered to still be valid.

In instances where changes to one or more factors used as the bases for the 2021 hazard potential classifications are identified (*e.g.*, downstream development that was not present in 2021), hypothetical dike breaches are considered at each of the three CCR surface impoundments to evaluate the impacts that a release of CCR and CCR wastewater would have on the identified factor(s). These hypothetical dike breaches are evaluated regardless of potential causes and/or apparent dike stability. When evaluating a hypothetical dike breach at a subject CCR surface impoundment, the solid waste materials in the given CCR surface impoundment are conservatively considered as an equivalent volume of liquid (*i.e.*, the ash pond is assumed to be entirely filled with liquid).

3.1 SUMMARY OF 2021 HAZARD POTENTIAL CLASSIFICATION ASSESSMENT

When conducting the 2021 hazard potential classification assessment, the following features at, near, or downstream of Ponds A, B, and C were considered:

- Buildings or areas where people reside, work, or congregate (Station facilities, private residences, private businesses, public buildings or spaces, *etc.*).
- Transportation infrastructure (roads, railroads, *etc.*).
- Bodies of water (rivers, creeks, lakes, *etc.*).
- Lifeline facilities (*e.g.*, electrical transmission towers and poles).

In the 2021 hazard potential classification assessment, it was noted that no private residences, private businesses, or public buildings or spaces near, or downstream of Ponds A, B, and C would be impacted by a failure or mis-operation at any of the ponds such that a loss of human life would be probable. Although two areas with private residences were identified within the hypothetical dike breach inundation area, the incremental rise in the White River flood stage at these locations caused by this hypothetical release from Ponds A, B, and C was estimated to be approximately one foot, which is not considered to be a risk to human life per the Federal Emergency Management Agency's "Federal Guidelines for Inundation Mapping of Flood Risks Associated with Dam Incidents and Failures."

The 2021 hazard potential classification assessment also concluded that no public roads, railroads, or highways downstream of Ponds A, B, and C would be impacted by a hypothetical failure at any of the CCR surface impoundments such that a loss of human life would be probable. While Pond A's eastern dike is adjacent to a rail line operated by the Indiana Southern Railroad, a review of publicly-available information on the railroad published by its owner, Genesee & Wyoming, Inc., indicated that trains traveling along the rail line predominately carry agricultural commodities and coal and do not provide public transportation services.

Therefore, it was determined that a loss of human life along the Indiana Southern Railroad line would be unlikely should a hypothetical failure or mis-operation occur at Pond A.

Finally, it was determined that a hypothetical failure at Pond A's eastern dike would be unlikely to cause a loss of human life at the Eagle Valley Combined Cycle Gas Turbine (CCGT) plant. Water released from such a breach would inundate the Indiana Southern Railroad line but would not advance further east towards the CCGT due to the presence of Former Pond D, which is over 10 feet taller than Pond A. Instead, it was determined that water would flow south towards the low-relief areas south of Pond A that are within the 100-year floodplain of the White River.

Based on the preceding evaluations and observations, the 2021 hazard potential classification assessment concluded that a loss of human life is not probable should a hypothetical failure or mis-operation occur at Ponds A, B, or C. Therefore, none of these ponds were classified as high hazard potential CCR surface impoundments. However, the assessment concluded that the contents released from hypothetical breaches at Ponds A, B, and C could be deposited directly into the White River and/or deposited into the Station's Discharge Canal and eventually spread into the White River. Therefore, the three CCR surface impoundments were classified as significant hazard potential CCR surface impoundments due to the environmental damage to the White River and other areas immediately downstream that could result from a hypothetical failure or mis-operation at these ponds.

3.2 CHANGES IN BASES FOR 2021 HAZARD POTENTIAL CLASSIFICATIONS

In April 2019, AES Indiana initiated closure of Ponds A, B, and C and, therefore, no longer uses these three CCR surface impoundments to manage any of Eagle Valley's wastestreams or indirect stormwater flows. As of the 2025 annual inspection performed in accordance with 40 CFR 257.83(b), no impounded water was present in the three CCR surface impoundments. As previously stated, the 2021 hazard potential classification assessment assumed that Ponds A, B, and C were completely full with water at the time of the hypothetical dike breaches considered. This assumption is conservative relative to the surface water conditions observed during the 2025 annual inspection and given the fact that Eagle Valley no longer uses these three CCR surface impoundments to manage its wastestreams. Because the surface water elevations assumed for Ponds A, B, and C in the 2021 hazard potential classification assessment are conservative relative to the ponds' current operating conditions, no updates to the surface water elevations are necessary for this 2026 hazard potential classification assessment.

In the spring of 2018, AES Indiana completed construction of and started commercial operations at the existing Eagle Valley CCGT. However, the evaluation completed in 2021 determined that water released from a hypothetical breach at Pond A's eastern dike would be confined to the low relief area between Pond A and Former Pond D where the Indiana Southern Railroad line is, staying within the 100-year floodplain of the

White River. Moreover, the Eagle Valley CCGT site was constructed to an elevation approximately six feet above the 100-year flood elevation, thereby decreasing the risk of the site being impacted by a failure or mis-operation at Pond A's eastern dike.

Other than the change in operational status of each CCR surface impoundment, the ongoing closure construction activities, and the continued operation of the existing Eagle Valley CCGT, there have been no significant modifications to Ponds A, B, and C (mass excavations, major embankment modifications, *etc.*); no significant modifications to the topography adjacent to the CCR surface impoundments; no operational changes to the Indiana Southern Railroad; and no significant residential, commercial, or industrial developments that have been constructed in the areas downstream of the CCR surface impoundments that would be impacted by a hypothetical dike breach. Therefore, the 2021 hazard potential classifications assigned to Ponds A, B, and C and the bases for these assignments remain valid for 2026.

3.3 2026 HAZARD POTENTIAL CLASSIFICATION ASSIGNMENTS

Hypothetical failures or mis-operations at Ponds A, B, and C result in no probable loss of human life. However, hypothetical failures or mis-operations at these three CCR surface impoundments could result in environmental damages to the White River and other areas immediately downstream that are beyond AES Indiana's property. Therefore, the following hazard potential classifications are assigned to the existing CCR surface impoundments at Eagle Valley in accordance with 40 CFR 257.73(a)(2):

- Pond A: Significant Hazard Potential
- Pond B: Significant Hazard Potential
- Pond C: Significant Hazard Potential

4.0 CERTIFICATION

I certify that:

- This periodic hazard potential classification assessment was prepared by me or under my direct supervision.
- The work was conducted in accordance with the requirements of 40 CFR 257.73(a)(2).
- I am a registered professional engineer under the laws of the State of Indiana.

Certified By: Travis Constantine Date: See Signature

Seal:

Travis Constantine
Digitally signed by Travis Constantine
Date: 2026.10.02 08:18:19-05'00'