aes Indiana

Eagle Valley Generating Station

Ponds A, B, & C Closure Plan

Revision 2

July 29, 2025

Issue Purpose: Use

Project No.: 10572-165

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ISSUE SUMMARY & CERTIFICATION

Revision	Purpose of Issue	Date	Pages Affected
0	Use	10/14/2016	All
1	Use	11/11/2020	All
2	Use	07/29/2025	All

This is to certify that this amendment to closure plan for Ponds A, B, and C at AES Indiana's Eagle Valley Generating Station has been prepared, reviewed, and approved in accordance with Sargent & Lundy's Standard Operating Procedure, SOP-0405, which is based on ANSI/ISO/ASSQC Q9001 Quality Management Systems.

I certify:

- This amended written closure plan meets the requirements of 40 CFR 257.102(b).
- This amended written closure plan was prepared by me or under my direct supervision.
- I am a registered professional engineer under the laws of the State of Indiana.

Certified By: Travis Constantine Date: July 29, 2025

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1.0 INTRODUCTION & PURPOSE

Federal CCR Rule References: 40 C.F.R. §§ 257.102(b), 257.102(b)(1)(vi), and 257.102(f)(2)(i)

This document provides the amended written closure plan for Ponds A, B, and C at AES Indiana's Eagle Valley Generating Station ("Eagle Valley" or the "Station") in accordance with the requirements for a written closure plan specified in 40 C.F.R. § 257.102(b). AES Indiana is also extending the closure deadline for Ponds A, B, and C by two years to April 17, 2028 pursuant to 40 C.F.R. § 257.102(f)(2)(ii)(B). On behalf of AES Indiana, Sargent & Lundy (S&L) has prepared this document to serve as the written closure plan for Ponds A, B, and C and demonstrate the need for a time extension for closing these coal combustion residual (CCR) surface impoundments.

AES Indiana intends to close Ponds A, B, and C through a hybrid closure approach by (1) first removing CCR potentially in contact with the site's seasonal-high groundwater table, (2) then backfilling the excavations with natural cohesive fill above the seasonal-high groundwater elevation, (3) then consolidating the CCR in the ponds, and (4) installing a final cover system over the ponds. In accordance with 40 C.F.R. §§ 257.102(b), 257.102(b)(1)(vi), and 257.102(f)(2)(i), this document:

- Describes how Ponds A, B, and C will be closed in accordance with 40 C.F.R. § 257.102.
- Describes the final cover system to be installed over Ponds A, B, and C.
- Describes the methods and procedures to be used to install the final cover system.
- Describes how the final cover system will achieve the performance standards specified in 40 C.F.R. § 257.102(d).
- Provides an estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.
- Provides an estimate of the largest area of the CCR unit ever requiring a final cover as required by 40 C.F.R. § 257.102(d) at any time during the CCR unit's active life.
- Provides a schedule for completing all activities necessary to satisfy the closure criteria in 40 C.F.R. § 257.102, including an estimate of the year in which all closure activities for the CCR unit will be completed.
- Substantiates the need for additional time to close the CCR unit beyond April 17, 2026.
- Provides a narrative supporting the designation of Ponds A, B, and C as a multi-unit system being closed as a single CCR unit.
- Justifies AES Indiana's two-year extension for closing Ponds A, B, and C and up to three more two-year extensions should more extensions be required in the future.

2.0 CLOSURE PLAN NARRATIVE DESCRIPTION

Federal CCR Rule References: 40 C.F.R. §§ 257.102(b)(1)(i) & 257.102(d)(1)

AES Indiana intends to close Eagle Valley Ponds A, B, and C by implementing a hybrid closure approach by:

1. Removing CCR potentially below the site's seasonal-high groundwater elevation.
2. Placing natural cohesive fill in the resulting excavations at least one foot above the seasonal-high groundwater elevation.
3. Consolidating and grading CCR within the ponds to support installation of a single final cover system over the CCR unit.
4. Installing the specified final cover system over the CCR unit.

This closure plan includes the following activities:

- **Removing existing pond infrastructure.** The existing ash sluice piping into Pond A; corrugated metal pipes interconnecting Ponds A, B, and C; and other piping within the CCR unit. The existing fence around the CCR unit will also be removed.

- **Clearing and grubbing.** Any significant vegetative growth (brush, tall grass, small trees, *etc.*) in Ponds A, B, and C will be cleared and grubbed. Stabilization of the existing surface will be performed as necessary to facilitate these activities via heavy machinery.

- **Dewatering of stored CCR, if necessary.** No free surface water is present in Ponds A, B, and C, so no initial dewatering is required prior to excavating and re-grading CCR within the unit. If free water is encountered during earthwork activities, the encountered free water will be extracted by installing a passive dewatering system comprised of a network of gravity drainage ditches and sumps. The location, depth, and frequency of these drainage ditches and sumps will be determined at the time of closure based on the prevailing conditions. The sumps will provide a collection point to temporarily hold extracted water until it is pumped into a water truck to be used for fugitive dust control within the unit or for blending with drier CCR being regraded to facilitate compaction. Water will not be discharged from the unit unless Eagle Valley's National Pollutant Discharge Elimination System (NPDES) permit is modified.

- **Removing deeper zones of CCR.** To minimize the post-closure infiltration of liquid into CCR being capped, areas where CCR may be potentially below the site's seasonal-high groundwater elevation will be removed. All excavations conducted for the purposes of removing these deeper zones of CCR will proceed until the excavated areas are visually clean of CCR material, at which point one foot of native soil will be excavated. All excavated material will be used as fill material for supporting the final cover system over Ponds A, B, and C (see Section 3.1). The excavated areas will be

backfilled first with natural cohesive fill up to at least one foot above the seasonal-high groundwater elevation, then with CCR thereafter. Following implementation of this excavation and backfill plan, the physical separation between the capped CCR and the site's groundwater will eliminate the infiltration of the site's groundwater through the capped CCR to the maximum extent feasible.

- **Consolidating and mass grading of CCR within the unit's solid waste boundary.** All CCR within the solid waste boundary of Ponds A, B, and C, including the deeper zones of CCR replaced with natural cohesive fill, will be consolidated within the proposed limits of the unit's final cover system. See Section 3.1 for a narrative description of how this CCR material will be graded and compacted to support the unit's final cover system.

- **Installing the final cover system.** After CCR fill (and general fill, if required) has been graded and compacted to the specified lines and grades, the final cover system will be installed over the consolidated CCR area. Per Section 3.2, this final cover system has been designed to minimize infiltration of storm water into the underlying CCR. The geosynthetic materials for the final cover system will be deployed over the supporting fill material and subsequently seamed. Fill layers will be carefully placed over the geosynthetic materials to preclude damage thereto. All materials and installation methods related to the final cover system will be subject to a stringent construction quality assurance (CQA) program. See Sections 3.2 and 3.3 for a description of the final cover system layers and how they will meet the performance standards promulgated under 40 C.F.R. § 257.102(d)(1).

3.0 FINAL COVER SYSTEM DESCRIPTION

Federal CCR Rule References: 40 C.F.R. §§ 257.102(b)(1)(iii) & 257.102(d)(1)

Pursuant to the closure performance standards prescribed in 40 C.F.R. § 257.102(d)(1), the final cover system encapsulating Ponds A, B, and C will:

1. Minimize the post-closure infiltration of liquid into the CCR.
2. Minimize the risk of release of CCR or contaminated run-off to the ground or surface waters, or to the atmosphere.
3. Preclude the probability of future impoundment of water, sediment, or slurry.
4. Provide major slope stability to prevent sloughing of the final cover system during the post-closure care period.
5. Minimize future maintenance.
6. Allow closure activities to be completed as quickly as practical consistent with recognized and generally accepted good engineering practices.

3.1 ESTABLISH GRADE & SUPPORT FOR FINAL COVER SYSTEM

To accomplish the preceding closure performance standards, the final cover system over Ponds A, B, and C will be a mounded drainage system. The final cover system will generally be graded between 2% and 12.5%, inclusive. To minimize erosion of the cap, diversion berms will be constructed on top of the final cover system to capture and control non-contact storm water as it channelizes; the alignments for these diversion berms will be graded at approximately 1%. Non-contact storm water run-off from the final cover system will drain into a perimeter ditch, thence discharging through a new outlet structure into the Station's Discharge Canal. Thus, the proposed final cover system will eliminate the future potential of water, sediment, and slurry within the closed CCR unit.

Fill material will be placed within Ponds A, B, and C to establish the lines and grade of the proposed final cover system over the CCR unit. This fill material will predominately consist of CCR from within the unit's solid waste boundary. If more fill material is required, natural soil from on-site or off-site borrow sources will be used. All fill material will be placed in lifts not exceeding 12 inches thick (loose thickness) and compacted to minimum of 90% of its maximum dry density per ASTM D1557 (*i.e.*, modified Proctor). The final slopes of the fill material supporting the final cover system (2% to 12.5%) will be globally stable from a geotechnical basis. Given these slopes will be shallower than the ponds' exterior dikes (33%) and will not be subject to hydraulic pressures, the dry slopes of CCR material (and general fill, if required) will be inherently more stable than the existing ponds' slopes, which were shown to be stable under 40 C.F.R. § 257.73(e) (Ref. 1). Thus, major slope stability has been provided for the CCR unit's final cover system.

3.2 INFILTRATION-CONTROL LAYER

Federal CCR Rule Reference: 40 C.F.R. §§ 257.102(d)(1)(i) & 257.102(d)(3)(ii)(A)

In order to minimize infiltration of precipitation to the maximum extent feasible through the final cover system and the subsequent risk of releases of CCR, leachate, or impacted stormwater run-off to the ground or surface waters, an infiltration-control layer will be placed on top of the graded CCR consolidated within the solid waste boundary for Ponds A, B, and C. This infiltration-control layer will consist of, in order of increasing proximity from the graded CCR, a geosynthetic clay liner, a geomembrane, a non-woven geotextile, and 18 inches of sand.

3.2.1 GEOMEMBRANE, GEOTEXTILE, AND SAND

The geomembrane within the final cover system's infiltration-control layer will consist of a 40-mil linear low-density (LLDPE) geomembrane, which has a minimal hydraulic conductivity that is less than the permeability of the natural subsoils underlying Ponds A, B, and C. The geomembrane will be subjected to a stringent quality assurance and control program. A nonwoven geotextile will be placed directly over the geomembrane

to prevent damage to the latter during placement of the overlying 18-in.-thick sand drainage layer. This sand layer will (1) promote drainage of any liquids that have percolated to the soil-geomembrane interface and (2) preclude damage to the geomembrane.

3.2.2 GEOSYNTHETIC CLAY LINER

To further minimize infiltration through the cover system, a geosynthetic clay liner (GCL) will be installed under the 40-mil LLDPE geomembrane in the proposed final cover system. As demonstrated in Table 1, the high-swell, low-permeability, and self-repair characteristics of the GCL's bentonite layer will be significantly more effective at limiting infiltration through the final cover system than the 18-in.-thick compacted soil layer specified in 40 C.F.R. § 257.102(d)(3)(i). (Note that both liquid flow rates in Table 1 are based on an assumed hydraulic head of 4.80 inches on the final cover system, which is the estimated 25-year, 24-hour precipitation depth at the Eagle Valley site (Ref. 2); this is a conservative assumption because the final cover system is sloped to preclude the build-up of liquid.) Thus, the composite effect of the geomembrane, the geotextile, the drainage sand layer, and the GCL complies with the level of performance required by 40 C.F.R. § 257.102(d)(3)(ii)(A) for infiltration control.

TABLE 1: LIQUID FLOW RATE COMPARISON BETWEEN GCL & COHESIVE SOIL FOR FINAL COVER SYSTEM OVER PONDS A, B, & C

Parameter	Symbol	Cohesive Soil	GCL
Hydraulic Conductivity	k	1×10^{-7} m/sec	5×10^{-11} m/sec
Hydraulic Head Above Layer	h	4.80 in. = 0.12 m	
Layer Thickness	t	18 in. = 0.46 m	7 mm = 0.007 m
Hydraulic Gradient Through Layer	$i = h / t$	0.26	17
Liquid Flow Rate Through Layer per Square-Meter of Final Cover System (40 C.F.R. § 257.70 Eq. 1)	$q = k \times (i + 1)$	1.3×10^{-7} $m^3/sec/m^2$	9.0×10^{-10} $m^3/sec/m^2$

3.3 EROSION-CONTROL LAYER

Federal CCR Rule Reference: 40 C.F.R. § 257.102(d)(3)(ii)(B)

The uppermost layer of the final cover system will consist of an erosion-control layer consisting of a 6-in.-thick layer of topsoil capable of sustaining native plant growth. The entire surface of this top layer will be seeded with a suitable seed mixture compliant with the Indiana Department of Transportation Standard Specifications to minimize erosion of the final cover system, and regular maintenance of the seeding will take

place until a vegetative cover is established and self-sustaining. The stormwater run-off management strategy described in Section 3.1 further minimizes erosion of the final cover system. Finally, all exterior slopes for the perimeter drainage ditch around the final cover system for Pond A, B, and C will be armored with 18 inches of riprap to protect the slope from floodwater flow velocity and wave activities.

4.0 ESTIMATED MAXIMUM INVENTORIES OF CCR

Federal CCR Rule Reference: 40 C.F.R. § 257.102(b)(1)(iv)

The estimated maximum inventory of CCR that will be contained within Ponds A, B, and C at any point over the unit's active life is approximately 855 acre-feet.

5.0 ESTIMATED COVER SURFACE AREA

Federal CCR Rule Reference: 40 C.F.R. § 257.102(b)(1)(v)

Based on the consolidation of CCR within the ponds' solid waste boundary described in Section 2.0, the final cover system over Ponds A, B, and C will occupy a total area of approximately 49.5 acres. This area is expected to represent the largest surface area that will ever require a final cover system at any point over the unit's active life.

6.0 CLOSURE SCHEDULE & DEADLINE EXTENSION

Federal CCR Rule References: 40 C.F.R. §§ 257.102(b)(1)(vi) & 257.102(f)(2)(i)

Table 2 lists the major milestones necessary to close Ponds A, B, and C with an estimated duration and year of completion for each milestone.

TABLE 2: PLANNING LEVEL SCHEDULE FOR CLOSURE OF PONDS A, B, & C

Task Description	Anticipated Duration	Anticipated Year of Completion[1]
Dewatering (If Necessary), Stabilization, Clearing & Grubbing, & Consolidation of Ash[2]	15 months	2026
Install Final Cover System, Perimeter Drainage Ditches, & Perimeter Access Roads	14 months	2027
Complete & Certify Closure of Ponds A, B, & C	–	2027[3]

[1] These years are based on a preliminary schedule for demonstrative purposes and are subject to change.
[2] Assumes no NPDES permit modifications are necessary for active dewatering.
[3] Completion of closure date subject to change pursuant to final closure timeframe under Federal CCR Rule, including additional potential extensions pursuant to 40 C.F.R. § 257.102(f)(2)(i).

Per the preceding planning level schedule, AES Indiana intends to complete closure of Ponds A, B, and C in 2027, which is beyond the current closure deadline of April 17, 2026, under the demonstration AES Indiana filed on April 17, 2024, under 40 C.F.R. § 257.102(f)(2)(i) (Ref. 3). However, pursuant to 40 C.F.R. § 257.102(f)(2)(ii)(B), AES Indiana may extend the closure deadline for Ponds A, B, and C by two years to April 17, 2028. In accordance with 40 C.F.R. § 257.102(b)(1)(vi), the following subsections provide the site-specific information, factors, and considerations that support this extension of the deadline for closing Ponds A, B, and C.

6.1 BACKGROUND

On April 17, 2019, AES Indiana initiated closure of Eagle Valley Ponds A, B, and C in accordance with 40 C.F.R. § 257.101(b)(1). Pursuant to 40 C.F.R. § 257.102(f)(1)(ii), AES Indiana was initially required to complete closure of Pond A, B, and C by April 17, 2024. However, prior to commencing physical closure activities at the ponds, AES Indiana first needed approval of its application to close Ponds A, B, and C ("Closure Application") from the Indiana Department of Environmental Management (IDEM or the Agency). AES Indiana submitted its initial Closure Application to IDEM on July 28, 2016, and subsequently worked with the Agency to respond to their multiple requests for additional information; to participate in the public involvement process (including hosting multiple public meetings) regarding the Closure Application; and to revise the Closure Application in accordance with IDEM's requests.

The latest revision to the Closure Application was submitted to IDEM on November 17, 2023, which addressed questions and comments the Agency sent to AES Indiana via e-mail on April 20, 2023, which was designated as Request for Additional Information #8 (RAI #8). On January 24, 2024, IDEM informed AES Indiana that the Agency was still reviewing Closure Application Rev. 4, did not require additional information at that time, and was preparing permit requirements. On February 21, 2024, IDEM informed AES Indiana that the Agency did not have a status update on the forthcoming permit requirements. Following this correspondence, AES Indiana prepared the first demonstration extending the closure deadline for Ponds A, B, and C from April 17, 2024, to April 17, 2026. AES Indiana placed the demonstration in Eagle Valley's operating record on April 17, 2024 (Rev. 3).

On March 14, 2024, IDEM's Office of Land Quality (OLQ), Geology Section completed its review of Closure Application Rev. 4 and sent groundwater monitoring requirements to the OLQ Solid Waste Permits Section to be incorporated into the closure/post-closure plan approval conditions. On May 6, 2024, the OLQ Engineering Section completed its review and sent engineering requirements to the OLQ Solid Waste Permits Section. Three days later, on May 9, 2024, IDEM informed AES Indiana that the completeness review of Closure Application Rev. 4 was finished, and that the application was deemed complete. IDEM then proceeded into the technical review of the application and opened a 30-day public comment period on

the application. The public comment period ended on June 10, 2024, after which IDEM started its review of the comments received, while continuing its technical review of Closure Application Rev. 4.

While IDEM continued its technical review of Closure Application Rev. 4 and the public comments received during the third quarter of 2024, AES Indiana assembled the bid packages for the closure work at Ponds A, B, and C to ensure closure activities could commence as soon as technically feasible following IDEM's approval of the closure application. Two bid packages were prepared between the third quarter of 2024 and the first quarter of 2025, one for the closure construction work and one for the closure CQA work. To support both bid events, AES Indiana updated the construction design drawings and technical specifications and prepared the corresponding commercial documents. During this time, AES Indiana also coordinated with adjacent landowners and Morgan County on the field logistics, anticipated limits of disturbance for the project, and other local permitting requirements. AES Indiana started soliciting bids from prospective contractors for the closure contract in November 2024 and from prospective contractors for the CQA contract in January 2025.

On January 10, 2025, IDEM issued final approval of Closure Application Rev. 4, including final approval conditions. This final approval was subject to a 15-day appeal window; however, no appeals were filed by the January 27, 2025, deadline. Having received the final approval during the bid period for the closure construction contract, AES Indiana could start closure activities at Pond A, B, and C upon selecting a construction contractor.

On January 24, 2025, two weeks after receiving final approval of the closure application from IDEM, AES Indiana closed the bid event for the closure construction contract. During the next few weeks, AES Indiana evaluated the bids received against the technical and commercial requirements in the bid package and the conditions in IDEM's final approval of the closure and post-closure plan for Ponds A, B, and C. This evaluation included a review and assessment of the bidders' preliminary construction schedules. Notably, all of the bidders indicated they would need additional time beyond April 17, 2026 to close the CCR unit, assuming the contract was awarded in March 2025. Based on the estimated volume of CCR to be excavated and graded, each bidder estimated the earthwork to develop the lines and grades and prepare the subgrade for the final cover system to go into or beyond the spring of 2026. Additional time would then be needed to install the geosynthetic and fill materials for the final cover system, which includes time needed to establish permanent vegetation.

In mid-March 2025, AES Indiana awarded the construction contract, and the contractor subsequently mobilized to the site to start clearing and grubbing existing vegetation within Ponds A, B, and C. Based on the construction contractor's project schedule, for which the earthwork and final cover system installation phases are summarized in Table 2 above, Ponds A, B, and C are expected to be closed in 2027. As previously stated, additional time beyond the April 17, 2026, deadline would have been required to close the

CCR unit regardless of the closure contractor selected for the work. Therefore, based on the time required to obtain approval of the closure application from IDEM and the time required for the construction contractor to execute the closure plan, it is technically infeasible for AES Indiana to complete closure of Ponds A, B, and C by April 17, 2026.

6.2 DEMONSTRATION FOR CLOSURE DEADLINE EXTENSION

Federal CCR Rule References: 40 C.F.R. § 257.102(f)(2)(i)

AES Indiana is extending the closure deadline for Ponds A, B, and C at Eagle Valley due to (1) a delay in receiving approval from IDEM on it Closure Application for the CCR unit and (2) the time required to excavate, regrade, and stabilize the CCR within the unit and subsequently install the final cover system.

6.2.1 TIME REQUIRED TO OBTAIN IDEM APPROVAL OF CLOSURE APPLICATION

Per 40 C.F.R. § 257.102(f)(2)(i)(D), the "time required or delays caused by the need to coordinate with and obtain necessary approvals and permits from a state or other agency" is a factor that may substantiate the need for additional time to close a CCR unit beyond the maximum timeframe stipulated in 40 C.F.R. § 257.102(f)(1), *i.e.*, five years. Pursuant to paragraph 10-9-1(c) of Title 329 to the Indiana Administrative Code (329 IAC 10-9-1(c)), the closure of CCR surface impoundments regulated by the Federal CCR Rule is subject to IDEM's approval. Although AES Indiana initiated closure of Ponds A, B, and C on April 17, 2019, AES Indiana could not proceed with closure construction activities until IDEM approves the Closure Application for the ponds.

AES Indiana filed its initial Closure Application (Rev. 0) for Ponds A, B, and C with IDEM on July 28, 2016, over 2.5 years before AES Indiana initiated closure of the multi-unit system under the Federal CCR Rule. Despite continuous coordination with IDEM to address the Agency's multiple RAIs on the application in a timely manner, the cumulative time required to obtain the necessary approval from IDEM to close Ponds A, B, and C has delayed the start of closure construction such that the ponds cannot be closed before April 17, 2026. Table 3 presents a timeline summarizing AES Indiana's and IDEM's actions to date regarding the Closure Application for Ponds A, B, and C. This timeline demonstrates that AES Indiana has continuously coordinated with IDEM to address the Agency's questions and comments on the Closure Application. In addition to responding to eight RAIs to date, AES Indiana has been proactive where possible to address the Agency's questions and comments prior to responding to these RAIs. For example, AES Indiana has scheduled and held multiple meetings with IDEM to discuss preliminary responses to multiple RAIs to ensure the information and plans being submitted to the Agency meet its expectations and needs. AES Indiana also performed multiple field studies at the site to provide additional data requested by IDEM, including three soil boring programs and a robust evaluation of the site's groundwater levels to model the site's seasonal-high groundwater table.

After receiving IDEM's final approval of the Closure Application on January 10, 2025, AES Indiana completed the bid period, evaluated bids, and awarded the construction contract for closing Ponds A, B, and C in a timely manner. The bid event closed on January 24, 2025, just before the appeal window closed for IDEM's final approval of the Closure Application. AES Indiana then evaluated the technical and commercial aspects of each of the several bids received for the contract, including conformance with the conditions in IDEM's final approval of the Closure Application. Between the end of January and mid-March 2025, AES Indiana completed its evaluation of the bids, selected a construction contractor, completed commercial negotiations, and awarded the contract. However, regardless of the contractor selected, each of the several bidders indicated that additional time beyond April 17, 2026, would be needed to close Ponds A, B, and C even if AES Indiana awarded the contract in March 2025. Therefore, in addition to the delay in receiving approval from IDEM to close Ponds A, B, and C, AES Indiana is extending the closure deadline for the CCR unit due to the time required to excavate, regrade, and stabilize the CCR within the unit and subsequently install the final cover system.

TABLE 3: TIMELINE FOR OBTAINING IDEM'S APPROVAL OF AES INDIANA'S CLOSURE APPLICATION FOR EAGLE VALLEY PONDS A, B, & C

Date	Event
July 28, 2016	AESI submits Closure Application Rev. 0 to IDEM.
November 2, 2016	AESI hosts public outreach meeting on Closure Application Rev. 0 in Martinsville, IN.
December 8, 2016	IDEM completes its review of Closure Application Rev. 0 and issues RAI #1 to AESI.
January 26, 2017	AESI responds to IDEM RAI #1.
April 7, 2017	IDEM completes its review of AESI's responses to RAI #1 and issues RAI #2.
June 5, 2017	AESI responds to IDEM RAI #2.
December 7, 2017	IDEM completes its review of AESI's responses to RAI #2 and issues RAI #3.
February 8, 2018	AESI responds to IDEM RAI #3.
August 15, 2018	IDEM completes its review of AESI's responses to RAI #3 and issues RAI #4, which includes a request to update the site's Groundwater Sampling and Analysis Plan.
September 19, 2018	AESI requests an extension from IDEM to respond to RAI #4 to provide additional time required to update the site's Groundwater Sampling and Analysis Plan.
September 20, 2018	IDEM approves extending RAI #4 deadline from October 15 to October 31, 2018.
October 30, 2018	AESI responds to IDEM RAI #4.
December 17, 2018	IDEM completes its review of AESI's responses to RAI #4 and issues RAI #5, which includes a request for additional subsurface data for Ponds A, B, and C.
February 5, 2019	AESI requests an extension from IDEM to respond to RAI #5 to perform the subsurface investigation work required to provide the data IDEM requested in the RAI.
February 11, 2019	IDEM approves extending deadline to respond to RAI #5 from February 13 to March 19, 2019.

TABLE 3: TIMELINE FOR OBTAINING IDEM'S APPROVAL OF AES INDIANA'S CLOSURE APPLICATION FOR EAGLE VALLEY PONDS A, B, & C

Date	Event
March 19, 2019	AESI responds to IDEM RAI #5.
April 17, 2019	AESI initiates closure of Ponds A, B, and C.
June 24, 2019	AESI submits a revised Closure Application (Rev. 1) to IDEM, incorporating all information and changes requested by IDEM in RAI Nos. 1 through 5.
August 15, 2019	AESI meets with IDEM to discuss the status of Closure Application Rev. 1.
October 22, 2019	IDEM completes its review of AESI's responses to RAI #5 and Closure Application Rev. 1 and issues RAI #6.
November 13, 2019	AESI requests an extension from IDEM to respond to IDEM RAI #6 due to the extent of changes to the Closure Application required to address the RAI and to allow for a meeting with IDEM to discuss AESI's preliminary responses.
November 13, 2019	IDEM approves extending the deadline to respond to RAI #6 from December 21, 2019, to January 31, 2020.
December 12, 2019	AESI meets with IDEM to discuss preliminary responses to IDEM RAI #6.
January 20-22, 2020	AESI requests an extension from IDEM to respond to IDEM RAI #6 to finalize the revised Closure Application, including updates to the cost estimates for closure and post-closure care.
January 22, 2020	IDEM approves extending the deadline to respond to RAI #6 from January 31 to February 28, 2020.
February 28, 2020	AESI submits a revised Closure Application (Rev. 2) to IDEM in response to IDEM RAI #6.
July 16, 2020	IDEM notifies AESI that, due to a recent decision by the Indiana office of Environmental Adjudication, IDEM cannot make a final decision on Closure Application Rev. 2 until another public involvement process is completed, including another public meeting and a 30-day public comment period.
November 13, 2020	IDEM issues a notification of completeness for Closure Application Rev. 2, starting the public involvement process.
December 4, 2020	AESI hosts a virtual meeting for external stakeholders on its plans for closing Ponds A, B, and C.
December 9, 2020	AESI hosts a virtual public meeting on its plans for closing Ponds A, B, and C.
December 9, 2020	30-Day public comment period on Closure Application Rev. 2 begins.
December 21, 2020	At the request of a member of the public, IDEM extends public comment period for Closure Application Rev. 2 by 30 days to February 7, 2021.
February 7, 2021	Public comment period on Closure Application Rev. 2 ends.
March 2, 2021	In an e-mail to a member of the public, IDEM indicates it is still reviewing the comments the Agency received on Closure Application Rev. 2.

TABLE 3: TIMELINE FOR OBTAINING IDEM'S APPROVAL OF AES INDIANA'S CLOSURE APPLICATION FOR EAGLE VALLEY PONDS A, B, & C

Date	Event
June 28 to November 4, 2021	During a temporary suspension of normal pumping operations at the Eagle Valley CCGT Plant's production wells, AESI installs 24 pressure transducers in various groundwater monitoring wells and piezometers at the site. This data is downloaded monthly and evaluated to determine whether the forecasted seasonal-high groundwater levels submitted in Closure Application Rev. 2 should be updated.
July 13, 2021	Based on public comments received on Closure Application Rev. 2, IDEM asks AESI to clarify (1) the bottom elevations of Ponds A, B, and C; (2) groundwater flow direction and levels; (3) the effect of the temporary suspension of normal pumping operations at the CCGT Plant's production wells on groundwater flow direction and levels; and (4) the life expectancy of the CCGT Plant.
December 23, 2021	AESI submits updated seasonal-high groundwater forecasts to IDEM as well as additional information requested by the Agency on July 13, 2021.
February 9, 2022	In an e-mail to a member of the public, IDEM issues the following update: • IDEM is still reviewing the additional information AESI submitted on December 23, 2021. • IDEM is amendable to accepting and responding to public comments on the revised aspects of the Closure Application if the Agency determines the revised plans differ substantially from the application currently pending before IDEM (*i.e.*, Closure Application Rev. 2).
June 23, 2022	AESI meets with IDEM to discuss the Agency's status on reviewing Closure Application Rev. 2 and the additional information submitted by AESI on December 23, 2021.
June 27, 2022	IDEM completes its review of Closure Application Rev. 2 and the additional information submitted by AESI on December 23, 2021, and issues RAI #7.
October 14, 2022	AESI submits Closure Application Rev. 3 in response to IDEM RAI #7.
March 9, 2023	AESI meets with IDEM to discuss the status of Closure Application Rev. 3.
April 17-19, 2023	AESI advances 11 borings in Ponds A, B, and C to verify bottom-of-ash elevations.
April 20, 2023	IDEM completes its review of Closure Application Rev. 3 and issues IDEM RAI #8.
May 19, 2023	AESI requests an extension from IDEM to respond to IDEM RAI #8 to finish collecting and reviewing additional data / information required to respond.
May 22, 2023	IDEM approves extending the deadline to respond to RAI #8 to July 20, 2023.
July 20, 2023	AESI submits partial responses to IDEM RAI #8 and requests an additional 60 days to develop the remaining responses while AESI continues to collect and review additional data / information.
August 7-11, 2023	AESI advances 30 borings in Ponds A, B, and C to verify bottom-of-ash elevations.
September 15, 2023	AESI submits remaining responses to IDEM RAI #8.
November 17, 2023	AESI submits Closure Application Rev. 4, updated in accordance with AESI's responses to IDEM RAI #8.

TABLE 3: TIMELINE FOR OBTAINING IDEM'S APPROVAL OF AES INDIANA'S CLOSURE APPLICATION FOR EAGLE VALLEY PONDS A, B, & C

Date	Event
January 24, 2024	In an e-mail to AESI, IDEM issues the following update: • IDEM is still reviewing Closure Application Rev. 4. • Office of Land Quality's (OLQ) Engineering Section does not currently require additional information. • OLQ Geology Section does not currently require additional information and is preparing permit requirements.
February 21, 2024	In an e-mail to AESI, IDEM informed AESI that the Agency did not have a status update on the forthcoming permit requirements.
March 14, 2024	IDEM OLQ Geology Section completes its review of Closure Application Rev. 4 and sends groundwater monitoring requirements to the OLQ Solid Waste Permits Section to be incorporated into the closure/post-closure plan approval conditions.
April 17, 2024	AESI files demonstration for extending closure deadline for Ponds A, B, and C to April 17, 2026 in accordance with 40 C.F.R. § 257.102(f)(2)(ii)(B).
May 6, 2024	IDEM OLQ Engineering Section completes its review of Closure Application Rev. 4 and sends engineering requirement to the OLQ Solid Waste Permits Section to be incorporated into the closure/post-closure plan approval conditions.
May 9, 2024	IDEM finishes completeness review of Closure Application Rev. 4 and informs AES Indiana that the application is complete and will proceed to technical review. This action starts a 30-day public comment period on Closure Application Rev. 4.
June 10, 2024	30-day public comment period on Closure Application Rev. 4 ends.
January 10, 2025	IDEM issues final approval of Closure Application Rev. 4. This action starts a 15-day window for appealing IDEM's decision.
January 27, 2025	15-day appeal window for appealing Closure Application Rev. 4 ends without appeals being filed.

Legend:

	AES Indiana Actions
	IDEM Actions

6.2.2 TIME REQUIRED TO COMPLETE CONSTRUCTION

As previously stated, each bidder for the closure construction contract indicated that Ponds A, B, and C could not be closed by April 17, 2026, even if the construction contract was awarded in March 2025, less than six weeks after the appeal window closed for IDEM's final approval of AES Indiana's Closure Application. Based on the preliminary project schedules submitted by the bidders for the closure construction contract, each bidder estimated the time required to excavate, regrade, and stabilize the CCR in the unit to support installation of the final cover system would go into or beyond the spring of 2026. Over 1 million cubic yards of CCR is expected to be excavated and regraded to remove CCR below the site's seasonal-high groundwater level and establish the lines and grades for the final cover system. Over 180,000 cubic yards of

natural cohesive fill is estimated to be placed and compacted in the excavations made to remove the deeper zones of CCR. Additional time is then needed to install the 49.5-acre, multi-component final cover system described in Section 3.0 and establish permanent vegetation. Each of the preliminary project schedules submitted during the bid event for the closure construction contract indicated that Ponds A, B, and C could not be closed by April 17, 2026, due to the forecasted start time predicated by the time required to receive final approval from IDEM on the project and the project's scope of work.

Per Table 2, the contractor awarded the closure construction contract anticipates needing 29 months to close Ponds A, B, and C in accordance with AES Indiana's closure plan for the unit. This schedule accounts for potential weather delays and includes working through the winters, to the extent possible. Based on the contractor mobilizing in the site in mid-March 2025 to start clearing and grubbing, AES Indiana expects Ponds A, B, and C to be closed by the fourth quarter of 2027. Therefore, based on (1) the delay in receiving IDEM's approval of AES Indiana's Closure Application and (2) the time required to excavate, regrade, and stabilize the CCR within the unit and subsequently install the final cover system, AES Indiana must extend the deadline for closing Ponds A, B, and C in accordance with 40 C.F.R. § 257.102(f)(2)(i).

6.3 NEW CLOSURE DEADLINE FOR PONDS A, B, & C

Federal CCR Rule Reference: 40 C.F.R. § 257.102(f)(2)(ii)(B)

Given (1) the demonstration in Section 6.2 that an extension to the closure deadline for Ponds A, B, and C is necessary due to (i) delays in obtaining approval from IDEM on AESI's Closure Application and (ii) the time required to excavate, regrade, and stabilize the CCR within the unit and subsequently install the final cover system and (2) the aggregate size of Ponds A, B, and C (51 acres) exceeding 40 acres, AES Indiana may, in accordance with 40 C.F.R. § 257.102(f)(2)(ii)(B), extend the closure deadline for Ponds A, B, and C by two years. Therefore, the new deadline to complete all closure activities at Ponds A, B, and C is now April 17, 2028.

Pursuant to 40 C.F.R. § 257.102(f)(2)(ii)(B), AES Indiana may extend the closure deadline for Ponds A, B, and C in multiple two-year increments, up to a total of five two-year extensions. This is the second such extension. Therefore, the closure deadline for Ponds A, B, and C may be extended up to three more times if such extensions are necessary. If a second extension is required, AES Indiana will prepare a separate demonstration in accordance with 40 C.F.R. § 257.102(f)(2)(i) that substantiates the factual circumstances that require the closure deadline for Ponds A, B, and C to be extended beyond April 17, 2028.

6.4 OWNER CERTIFICATION

Federal CCR Rule Reference: 40 CFR 257.102(b)(1)(v)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

7/31/25

Greg Ellis
Director of Generation – Eagle Valley

Date

7.0 AMENDMENTS TO CLOSURE PLAN

Federal CCR Rule Reference: 40 C.F.R. § 257.102(b)(3)

AES Indiana will amend this written closure plan whenever the planned closure activities described herein are significantly affected by either (1) an operational change to Ponds A, B, or C or (2) an unanticipated event requires revisions to the planned closure activities. If this written closure plan is revised, AES Indiana will retain an independent, qualified professional engineer licensed in the State of Indiana to provide written certification that the amended written closure plan meets the requirements of 40 C.F.R. § 257.102(b).

8.0 COMPLETION OF CLOSURE ACTIVITIES

Federal CCR Rule Reference: 40 C.F.R. § 257.102(f)(3)

Upon completion of closure of Ponds A, B, and C, AES Indiana will obtain a certification from an independent, qualified professional engineer licensed in the State of Indiana verifying that the CCR unit has been closed in accordance with the closure plan in effect at the time of closure.

9.0 REFERENCES

1. Sargent & Lundy. "Eagle Valley Generating Station, 2021 CCR Surface Impoundment Safety Factor Assessment." 5 Oct. 2021.

2. Office of the Morgan County Surveyor. "Morgan County Stormwater Design Manual." Nov. 2023.

3. Sargent & Lundy. "Eagle Valley Generating Station, Demonstration for Extension to Closure Deadline for Ponds A, B, & C." Rev. 0. 17 Apr. 2024.