2025 Annual Dam and Dike Inspection Report

Ash Pond

Kammer Power Plant

Marshall County, West Virginia

September 2025

Prepared for: Franklin Realty

Prepared by: American Electric Power Service Corporation
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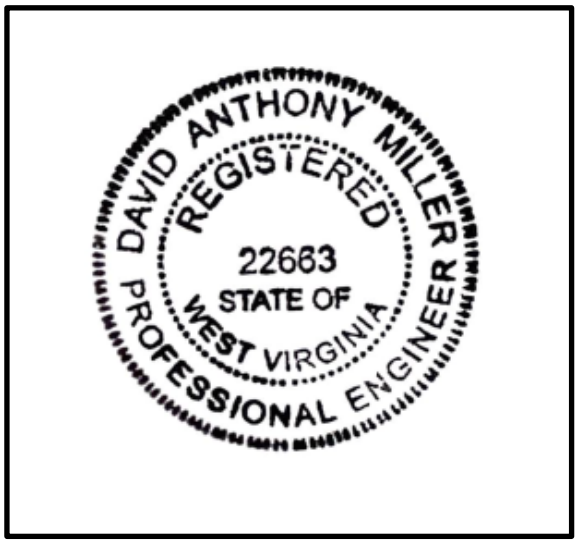
Kammer Power Plant
Ash Pond

PREPARED BY Blake Arthur DATE 10/08/2025
Blake Arthur, P.E.

REVIEWED BY Daniel S Murphy DATE 10/8/2025
Dan Murphy, P.E.

APPROVED BY David Anthony Miller DATE 12.01.2025
David A. Miller, P.E.
Director – Ash Management Services



I certify to the best of my knowledge, information and belief the information contained in this report meets the requirements of 40 CFR § 257.83(b).

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Attachments

1.0 INTRODUCTION

This report was prepared by AEP- Ash Management Services, in part, to fulfill requirements of 40 CFR 257.83 for the legacy CCR surface impoundments inspections and to provide Franklin Realty an evaluation of the Ash Pond at the Kammer Power Plant.

The inspection was performed on September 26, 2025. The inspection party consisted of Mr. Dan Murphy, P.E., Mr. Blake Arthur, P.E., Mr. Daniel Eurich, P.E. and Mrs. Rachel Scroggins. The facility contact was Mr. Stephen Reynolds. Weather conditions during the inspection were partly cloudy, and the temperature was near 70°F. There was about 1.5 inches of rainfall recorded over the seven days prior to the inspection, with roughly 0.6 inches of rain in the evening of the day prior to the inspection.

2.0 DESCRIPTION OF IMPOUNDMENTS

The Kammer Plant was commissioned in 1958 and shut down in 2015. The Kammer Ash Pond was operated from 1958 to 2015 while the Kammer Power Plant was generating electricity. The Kammer Ash Pond is surrounded by an earthen berm with a crest elevation of approximately 640 feet msl based on topographic data presented in Figure 2.

The Ash Pond is approximately 20 acres and is located adjacent to the Ohio River in Marshall County, West Virgina. The water elevation in the Ash Pond is controlled with an outfall structure that was located in the southwest corner. During an overflow condition, decant from the pond is discharged into the Ohio River. The outlet of the decant structure pipe is reportedly El. 613 ft-msl and beneath the present-day normal water surface elevation of the Ohio River at the Hannibal Lock and Dam.

Based on record drawings, the bottom of the Ash Pond is elevation 612.5 ft-msl and original ground within the Ash Pond Area varied between El 625 to 638 ft- msl. The records drawings show the exterior slope of the dike is 2H:1V and the interior slopes are 1.75H:1V.

A series of splitter dikes have been constructed within the Ash Pond to control flow and allow for access for excavation equipment during clean-out events. The splitter dikes have a concrete flume near the eastern end to pass water.

3.0 REVIEW OF AVAILABLE INFORMATION (257.83(b)(1)(i))

In addition to the current visual inspection, a review of available information regarding the status and condition of the Kammer Ash Pond, including files available in the operating record, was conducted. Available information consists of design and construction information. Based on the findings of the current visual inspection and the review of the available data, it is concluded that the facility is performing as intended in the design documents and there were no signs of actual structural weakness or adverse conditions.

4.0 INSPECTION (257.83(b)(1)(ii))

4.1 CHANGES IN GEOMETRY SINCE LAST INSPECTION (257.83(b)(2)(i))

No changes in geometry since last inspection were found.

4.2 INSTRUMENTATION (257.83(b)(2)(ii))

There is no instrumentation at the Ash Pond.

4.3 IMPOUNDMENT CHARACTERISTICS (257.83(b)(2)(iii, iv, v))

Table 1 is a summary of the minimum, maximum, and present depth and elevation of the impounded water & CCR since the previous annual inspection; the storage capacity of the impounding structure at the time of the inspection; and the approximate volume of the impounded water and CCR at the time of the inspection.

The information in this table is based on visual observations made during the inspection.

Table 1- Impoundment Characteristics

Approximate **Minimum** depth (elevation) of impounded water since last annual inspection	5 ft (628 ft-msl)
Approximate **Maximum** depth (elevation) of impounded water since last annual inspection	6 ft.(629 ft-msl)
Approximate **Present** depth of impounded water at the time of the inspection	6 ft. (629 ft msl)
Approximate **Minimum** depth (elevation) of CCR since last annual inspection	The Kammer Ash Pond does not receive CCR.
Approximate **Maximum** depth (elevation) of CCR since last annual inspection	The Kammer Ash Pond does not receive CCR.
Approximate **Present depth** (elevation) of CCR at the time of the inspection	11 ft. (623 ft msl)
Storage Capacity of impounding structure at the time of the inspection [crest el]	500 acre-ft
Approximate volume of impounded water at the time of the inspection	105 acre-ft
Approximate volume of CCR at the time of the inspection	180 acre-ft

4.4 DEFINITIONS OF VISUAL OBSERVATIONS AND DEFICIENCIES

This summary of the visual observations uses terms to describe the general appearance or condition of an observed item, activity or structure. The meaning of these terms is as follows:

Good: A condition or activity that is generally better or slightly better than what is minimally expected or anticipated from a design or maintenance point of view.

Fair/Satisfactory: A condition or activity that generally meets what is minimally expected or anticipated from a design or maintenance point of view.

Poor: A condition or activity that is generally below what is minimally expected or anticipated from a design or maintenance point of view.

Minor: A reference to an observed item (e.g., erosion, seepage, vegetation, etc.) where the current maintenance condition is below what is normal or desired, but which is not currently causing concern from a structure safety or stability point of view.

Significant: A reference to an observed item (e.g. erosion, seepage, vegetation, etc.) where the current maintenance program has neglected to improve the condition. Usually conditions that have been identified in the previous inspections, but have not been corrected.

Excessive: A reference to an observed item (e.g., erosion, seepage, vegetation, etc.) where the current maintenance condition is above or worse than what it is normal or desired, or which may have affected the ability of the observer to properly evaluate the structure or particular area of interest or which may be a concern from a structure's safety or stability point of view.

This document also uses the definition of a "deficiency" as referenced in the CCR rule section §257.83(b)(5) Inspection Requirements for CCR Surface Impoundments. This definition has been assembled using the CCR rule preamble as well as guidance from MSHA, "Qualifications for Impoundment Inspection" CI-31, 2004. These guidance documents further elaborate on the definition of deficiency. Items not identified as a deficiency are considered routine maintenance activities or items to be monitored.

A "deficiency" is some evidence that a dam has developed a condition that could impact the structural integrity of the dam. There are four general categories of deficiencies. These four categories are described below:

1. Uncontrolled Seepage

   Uncontrolled seepage is seepage that is not behaving as the design engineer has intended. An example of uncontrolled seepage is seepage that comes through or around the embankment and is not collected and safely carried off by a drain. Seepage that is collected by a drain can still be uncontrolled if it is not safely transported. Seepage that is not clear and is turbid would also be considered as uncontrolled. Seepage that is unable to be measured and/or observe it is considered uncontrolled seepage. [Wet or soft areas are not considered as uncontrolled seepage but can lead to this type of deficiency. These areas should be monitored more frequently.]

2. Displacement of the Embankment

Displacement of the embankment is a large scale movement of part of the dam. Common signs of displacement are cracks, scarps, settlement, bulges, depressions, sinkholes and slides.

3. Blockage of Water Control Appurtenances

   Blockage of water Control Appurtenances is the restriction of flow at spillways, decant or pipe spillways, or drains.

4. Erosion

   Erosion is the gradual movement of surface material by water, wind or ice. Erosion is considered a deficiency when it is more than a minor routine maintenance item.

4.5 VISUAL INSPECTION (257.83(b)(2)(i))

A visual inspection of the Kammer Ash Pond was conducted to identify any signs of distress or malfunction of the impoundment and appurtenant structures. Specific items inspected included all structural elements of the dam such as inboard and outboard slopes, crest, and toe; as well as all appurtenances.

Overall, the facility is in fair to good condition. The impoundment is functioning as intended with no visible signs of potential structural weakness or conditions, which are disrupting to the safe operation of the impoundment. Inspection photos are included in Attachment B. Additional pictures taken during the inspection can be made available upon request.

The following summarizes the visual inspection of the Kammer Ash Pond:

The exterior slopes showed no signs of distress such as sloughing, bulges or erosion. One location on the northern interior slope showed an erosion rill approximately 12" deep. The interior and exterior slopes are overgrown with vegetation that should be maintained to 12 inches or less, and made visual inspection difficult. There was one area of a possible depression located on the eastern exterior slope, across the pond from groundwater monitoring well AP-5D/5S. The dense vegetation prevented a close inspection of this area. Woody vegetation should be removed to prevent root intrusion into the dike.

The crest of the dam was in good condition with no signs of ruts or misalignement. Groundwater monitoring wells have been installed in multiple locations around the site. The wells had concrete pads, bollards and locked protective housings installed. A 530' foot long section along the crest has concrete vehicle barriers installed as a safety precaution.

The primary discharge structure is in good condition with no observed blockages. The oil boom around the structure appeared in functioning condition.

The interior discharge structure on the splitter dike is in fair condition and should be cleared of vegetation to allow the structure to operate as designed. There was no evidence of beaver activity in this area during this inspection.

The stormwater inlet appears to be in satisfactory condition, with some corrosion in the bottom invert of the pipe.

4.6 CHANGES THAT EFFECT STABILITY OR OPERATION (257.83(b)(2)(vii))

Based on review of the prior inspection report and interviews with the plant point of contact, there were no changes that would affect the stability of the impounding structure.

5.0 SUMMARY OF FINDINGS

5.1 GENERAL OBSERVATIONS

The Kammer Ash Pond is generally in fair to good condition and appears to be functioning as intended with no signs of structural weakness. The constructed embankment appears to be in satisfactory condition structurally, but vegetation on the slopes should be addressed to be 12-inches or less. Woody vegetation should be removed and can be addressed with brush mowing. The erosion on the north slope should be monitored and stabilized if it continues to deepen or expand.

5.2 MAINTENANCE ITEMS

The following maintenance items were identified during the visual inspection:

1. Maintain vegetation to 12-inches or less on the slopes.

5.3 ITEMS TO MONITOR/INVESTIGATE

The following items were identified during the visual inspection as items to be monitored or investigated:

1. After completing vegetation maintenance, investigate the apparent depression located on the eastern exterior slope.
2. Monitor the erosion on the northern interior slope.
3. Monitor the oil boom and replace as necessary.

5.4 DEFICIENCIES (257.83(b)(2)(vi))

At the Kammer Ash Pond there were no signs of structural weakness or disruptive conditions that were observed at the time of the inspection that would require additional investigation or remedial action. There were no deficiencies noted during this inspection or during any of the periodic 7-day or 30-day inspections. A deficiency is defined as: 1) uncontrolled seepage, 2) displacement of the embankment, 3) blockage of control features, or 4) erosion, more than that requiring minor maintenance.

If any of these conditions occur before the next annual inspection contact, or if you have any questions with regard to this report, please contact Dan Murphy at dsmurphy1@aep.com or David Miller at damiller@aep.com

ATTACHMENT A

Location Map

Attachment A
Kammer Ash Pond Site Map
Drawn by: Dan Murphy
Date: October 1, 2025

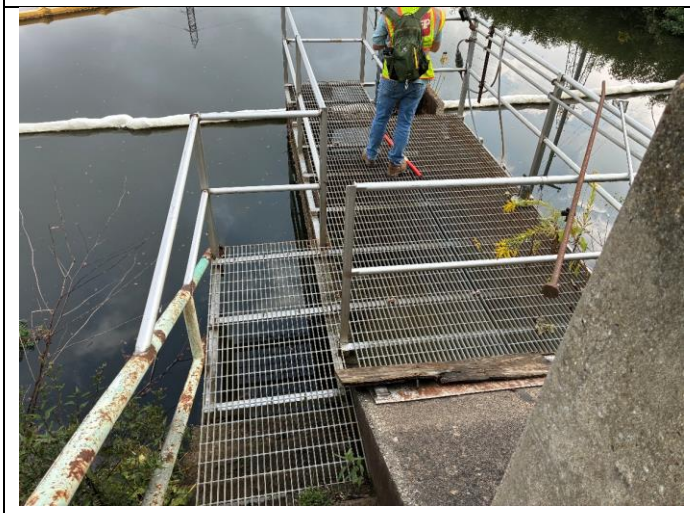
Note: Digital Elevation Model was obtained from public LiDAR available through the West Virginia Elevation and LiDAR Download tool.

Aerial Photograph from AEP, Dec 2024.

AMERICAN ELECTRIC POWER

ATTACHMENT B

Inspection Photos

	Photograph 1: CCR Impoundment identification sign
	Photograph 2: General View of Site looking North
	Photograph 3: Outlet Structure.

	Photograph 4: Looking into Outlet Structure.
	Photograph 5: General View looking south along dike.
	Photograph 6: General View of Ash Pond looking East.

	Photograph 7: Location sign at outfall.
	Photograph 8: Looking west along southern dike. Vegetation needs maintained.
	Photograph 9: Interior control structure.

	Photograph 10: Erosion on Northern pond slope.
	Photograph 11: View of the apparent depression on eastern exterior slope
	Photograph 12: Another view of the apparent depression on the eastern slope.