



East Fly Ash Pond Initial Dam and Dike Inspection Report

Kanawha River Power Plant, Hansford, West Virginia

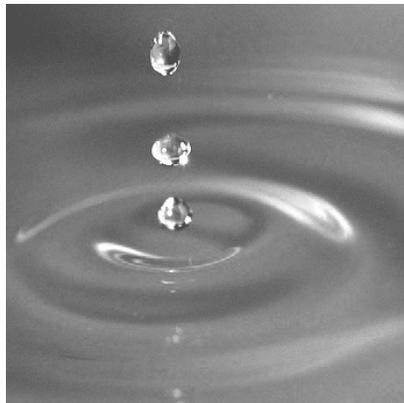
Submitted to:

American Electric Power Service Corporation
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Columbus, OH 43215

Submitted by:

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January 2025
Project 2407654



Pedro Amaya, PE
Senior Consultant

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2024 Annual Inspection Report

East Fly Ash Pond Kanawha River Power Plant



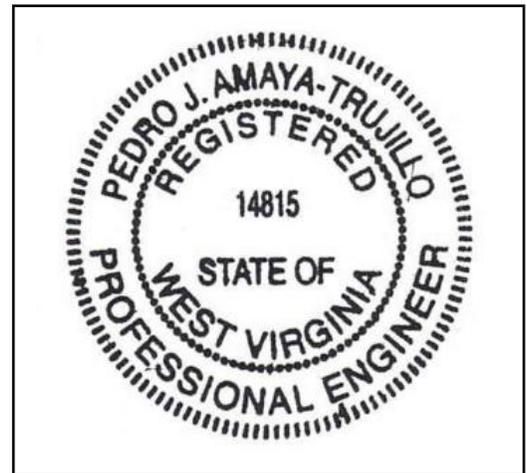
Pedro J. Amaya

Signature

Pedro Amaya, PE
Senior Consultant
GEI Consultants, Inc.

January 31, 2025

Date



I certify, to the best of my knowledge, that the information provided in this report satisfies the requirements of 40 CFR 257.83(b).

Table of Contents

1.	Introduction	1
2.	Description of Impoundments	2
3.	Review of Available Information (257.83(b)(1)(i))	3
4.	Inspection (257.83(b)(1)(ii))	4
4.1	Changes in Geometry Since Last Inspection (257.83(b)(2)(i))	4
4.2	Instrumentation (257.83(b)(2)(ii))	4
4.3	Impoundment Characteristics (257.83(b)(2)(iii, iv, v))	4
4.4	Definitions of Visual Observations and Deficiencies	5
4.5	Visual Inspection (257.83(b)(2)(i))	6
4.6	Changes that Effect Stability or Operation (257.83(b)(2)(vii))	7
5.	Summary of Findings	8
5.1	General Observations	8
5.2	Maintenance Items	8
5.3	Items to be Monitored	8
5.4	Items to be Addressed	9
6.	Deficiencies (257.83(b)(2)(vi))	10

Figures

Figure 1 – Site Location Map

Figure 2 – Facility Plan

Figure 3 – Site Plan

Figure 4 – Items to be Monitored

Figure 5 – Items to be Addressed

Appendices

Appendix A – Photolog

JRP

B:\Working\AEP\2407654 AEP Legacy CCR SI Inspection\05_GIS\Final\Kanawha East Fly Ash Pond\Final_KanawhaEastFlyAshPond_Report.docx

1. Introduction

GEI Consultants, Inc. was retained by AEP to implement the initial annual inspection of the Legacy CCR Surface Impoundments at various AEP facilities. The initial annual inspection is required by February 10, 2025 as a result of the EPA's provision to 40 CFR 257.50(e) in response to the August 21, 2018 USWAG decision. The provision indicates that Legacy CCR Surface Impoundments are subject to 40 CFR 257 (CCR Rule), where applicable, with an effective date of November 8, 2024.

As a result, GEI's Chris Keenan. performed the initial annual inspection of the East Fly Ash Pond at the Kanawha River Power Plant to fulfill requirements of 40 CFR 257.83. Mr. Justin R. Jent was the AEP contact who assisted with the initial annual inspection and provided history of Legacy CCR Surface Impoundment. This report was prepared by Pedro Amaya, PE and Jeff Piaskowski, PE of GEI and serves as a summary of the inspection and an assessment of the general conditions of the East Fly Ash Pond at the former Kanawha River Power Plant.

The inspection was performed on October 15, 2024, in general accordance with the Mining Safety and Health Administration (MSHA) Dam Inspection Guidelines. Weather conditions were overcast with mild temperatures between 40 and 50 degrees Fahrenheit. Less than 0.1-inches of precipitation was recorded at the regional airport in Charleston, West Virginia in the 7 days prior to the inspection.

The Kanawha River Power Plant is located south of Glasgow, West Virginia as shown on Figure 1 – Site Location Map. The facility arrangement is provided on Figure 2 – Facility Plan. The East Fly Ash Pond and its appurtenances are shown on Figure 3 – Site Plan. Locations of items to be monitored and items to be addressed are provided on Figure 4 and Figure 5, respectively.

2. Description of Impoundments

The area of the East Fly Ash Pond is approximately 22 acres and is located adjacent to the Kanawha River in Kanawha County, West Virginia. The Kanawha East Fly Ash Pond was operated as a surface impoundment from approximately 1953 to sometime prior to 1989. The East Fly Ash Pond is surrounded by an earthen berm with an approximate elevation of 625 ft-msl based on topographic data presented in Figure 2. Based on 1951 drawings, the original ground within the pond area ranged from 625 to 605 ft-msl. The pond area was dug down to elevation 606 to 604, and the pond bottom was sloped towards the outfall structure in the southwest corner.

While operating as a fly ash pond, the water elevation was controlled with an outfall structure that was located in the southwest corner. During an overflow condition, decant from the pond was discharged into the Kanawha River.

In 1989, AEP submitted a permit to construct a landfill overlying the former East Fly Ash Pond. A revised landfill permit was submitted in 2017 and the landfill was capped and closed.

3. Review of Available Information (257.83(b)(1)(i))

GEI understands that AEP is currently gathering pertinent information related to the Kanawha East Fly Ash Pond. This information was not available for review prior to preparing this report. This section will be updated in subsequent annual inspection reports.

4. Inspection (257.83(b)(1)(ii))

4.1 Changes in Geometry Since Last Inspection (257.83(b)(2)(i))

This section is not applicable, as this is the Kanawha East Fly Ash Pond’s initial annual inspection in accordance with 40 CFR 257.83(b).

4.2 Instrumentation (257.83(b)(2)(ii))

This section is not applicable, as the Kanawha East Fly Ash Pond does not have any instrumentation.

4.3 Impoundment Characteristics (257.83(b)(2)(iii, iv, v))

Below is a summary of the Kanawha East Fly Ash Pond characteristics.

IMPOUNDMENT CHARACTERISTICS	
Water Surface Elevation at time of the inspection	Ponded water was not visible from the surface
Approximate Minimum, Maximum, and Present depth/elevation of impounded water since last annual inspection	This is the initial inspection and ponded water was not visible from the surface.
Approximate Minimum Maximum and Present depth/elevation of CCR since last annual inspection	This is the initial inspection and there is approximately 1.3 Million CY of CCR is present.
Storage Capacity of impounding structure at the time of the inspection	Approximately 600,000 CY (as surface impoundment)
Approximate volume of impounded water at the time of the inspection	Ponded water was not visible from the surface.
Approximate volume of CCR at the time of the inspection	Approximately 1.3 Million CY of CCR is present.

Notes:

1. na

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, cracks, concrete surface 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, cracks, concrete surface etc.) where the current maintenance program has neglected to improve the condition. Usually, conditions that have been identified in previous inspections, but have not been corrected.
- Excessive:** A reference to an observed item (e.g. erosion, seepage, vegetation, cracks, concrete surface etc.) where the current maintenance condition is below or worse than what is normal or desired, and which may have affected the ability of the observer to properly evaluate the structure or area being observed or which may be a concern from a structure safety or stability point of view.

This document also uses the definition of a “deficiency” as referenced in the CCR rule section §257.84(b)(5) Inspection Requirements for CCR Landfills. 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 defined by deficiency are considered maintenance or items to be monitored.

A “deficiency” is some evidence that the CCR Unit has developed a problem that could impact its structural integrity. There are four general categories of deficiencies. These four categories are described below:

1. Uncontrolled Seepage

Uncontrolled seepage is an uncontrolled release from the unit.

2. Displacement of the Embankment

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

3. Blockage of Control Features

Blockage of Control Features 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 Kanawha East Fly Ash Pond was conducted to identify signs of distress or malfunction of the impoundment and appurtenant structures. Specific items inspected included structural elements of the dam such as upstream and downstream slopes, crest, and toe; as well as appurtenances such as the outlet/spillway structure. Photographs taken during the inspection are provided in Attachment A - Photolog.

The following summarizes the visual inspection of the Kanawha East Fly Ash Pond:

The rip rap cover/slopes of the East Fly Ash Pond are in good condition. The vegetation on the cover was maintained to 12-inches or less and no erosion was observed as shown in Photograph No. 1-4, 8, 9, and 28.

The downstream slope of the dam is in fair to poor condition as its overgrown with woody vegetation that should be addressed/maintained to 12-inches or less as shown in Photograph Nos. 5, 6, 7, 10, 13-27, 30, and 31. Isolated areas of the downstream slope showed signs of significant erosion. These areas should be addressed as shown in Photograph No. 16-21, 30, and 31. AEP may want to consider alternative drainage patterns to distribute stormwater off of the riprap cover to multiple downchute locations.

Photograph No. 11 and 12 show an area where significant erosion was previously repaired. This area should continue to be monitored, and erosion should be addressed before it becomes significant.

Areas of significant erosion/scarp conditions were found on the downstream slope. These areas are shown in Photograph No. 14, 15, 18, 23, 24, 25, 26, and 27 and should be addressed before conditions deteriorate.

The crest of the dam is in good condition and is used as an access road as shown in Photograph No. 9 and 28.

The stormwater outfall is in good condition as shown in Photograph No. 29.

4.6 Changes that Effect Stability or Operation (257.83(b)(2)(vii))

This section is not applicable, as this is the initial annual inspection report for the Kanawha East Fly Ash Pond.

5. Summary of Findings

5.1 General Observations

The Kanawha East Fly Ash Pond condition ranges from generally poor to good but appears to be functioning with no signs of structural weakness. The poor conditions are limited to isolated areas on the downstream slope where concentrated stormwater continues to cause erosion/scarps on the steep slope. AEP should consider assessing alternative drainage patterns and stormwater controls to direct concentrated stormwater flows to down chutes appropriately lined for the designed storm events.

The constructed embankment of the facility appears in fair condition structurally, but woody vegetation on the downstream slope has become overgrown and should be addressed/maintained to 12-inches or less within 25-feet of the limits of the man-made structure. AEP could consider following up with a logging company to determine if logging these areas is a cost-effective approach to addressing the vegetation.

The East Fly Ash Pond stormwater outlet was in good condition, free of any obstructions, and showed no signs of erosion.

5.2 Maintenance Items

No items were identified as items to be maintained during the visual inspection.

5.3 Items to be Monitored

The following items were identified during the inspection as items that should be monitored and if necessary, addressed if conditions become more significant.

- Item 11 – Monitor conditions of previously repair erosion area.
- Item 12 – Monitor conditions of previously repair erosion area.

5.4 Items to be Addressed

The following items were identified during the inspection as items that should be addressed.

- Address/maintain vegetation to 12-inches or less on the downstream slopes. Applies to Item 5, 6, 7, 13-27, 30 and 31.
- Address significant/major erosion. Applies to Item 16-21, 30 and 31.

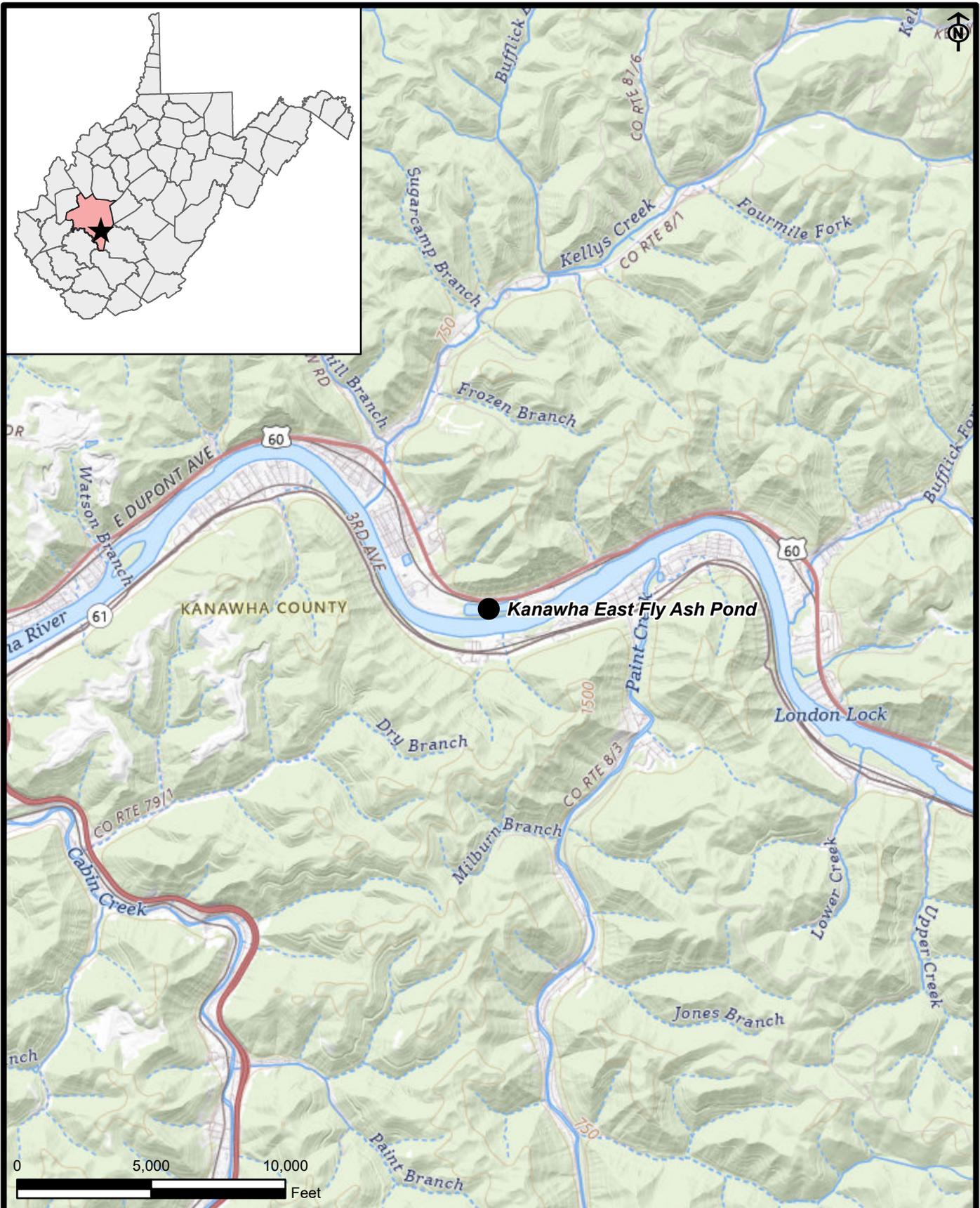
6. Deficiencies (257.83(b)(2)(vi))

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 inspections. A deficiency is defined as either:

- uncontrolled seepage
- displacement of the embankment
- blockage of control features
- erosion, more than minor maintenance

If any of these conditions occur or if you have any questions with regard to this report, please contact Dan Murphy at 614-933-2467 / dsmurphy1@aep.com or David Miller at 614-716-2281 / damiller@aep.com.

Figure 1 – Site Location Map



2024 East Fly Ash Pond Inspection
 Kanawha River Power Plant
 Hansford, West Virginia

American Electric Power Service Corporation
 Columbus, OH 43215



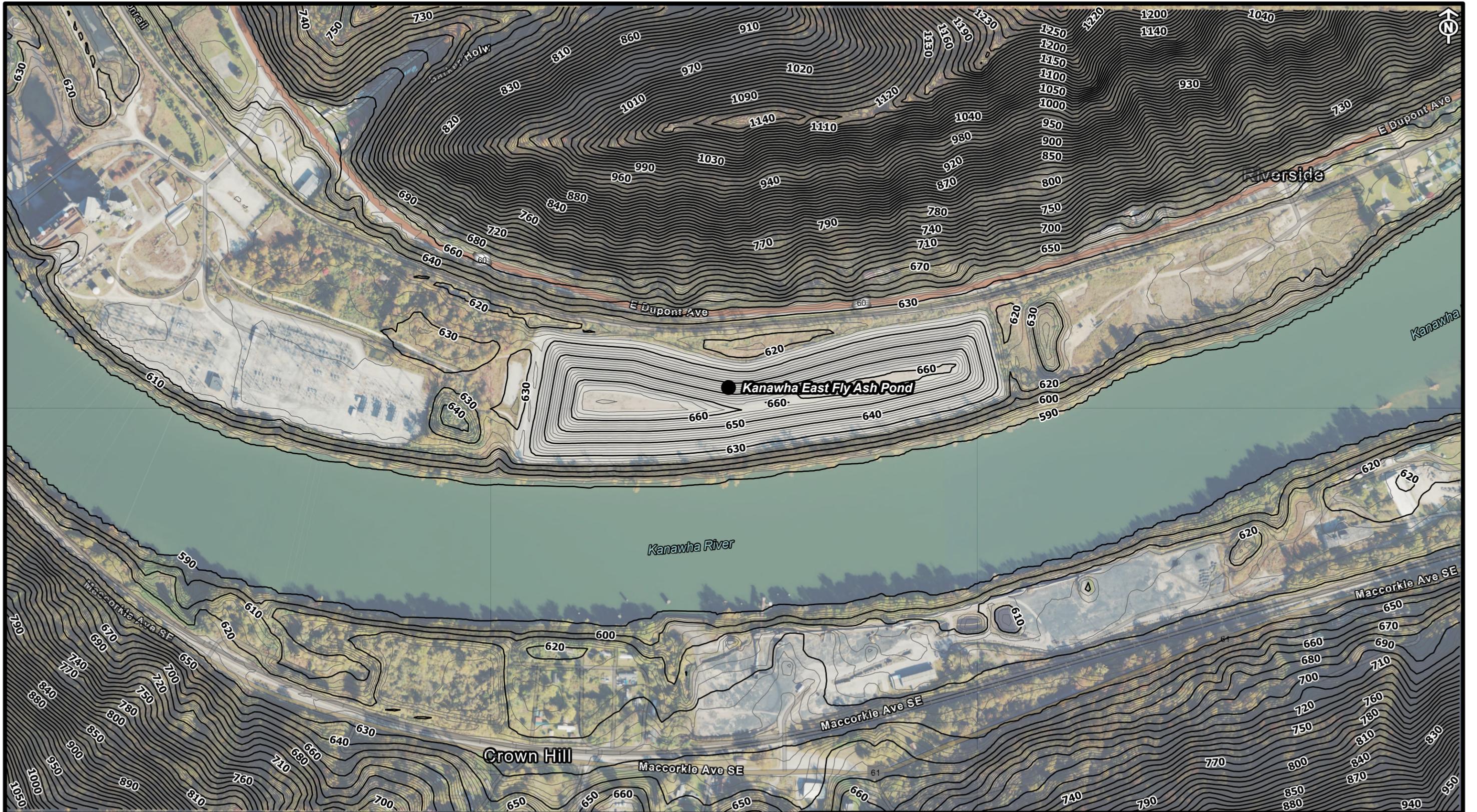
SITE LOCATION DIAGRAM

Project 2407654

January 2025

Fig. 1

Figure 2 – Facility Plan



LEGEND:

- 2021 Contours (10ft Intervals)
- 2021 Contours (2ft Intervals)

NOTES:

1. Aerial image obtained from USDA NAIP. Image captured summer of 2022.
2. Contours derived from 2021 LIDAR USGS DEM. U.S. Geological Survey, 20230911, USGS 1/3 Arc Second n39w082 20230911: U.S. Geological Survey.
3. Site conditions may change over time, accuracy is not guaranteed.



2024 East Fly Ash Pond Inspection
 Kanawha River Power Plant
 Hansford, West Virginia

American Electric Power Service Corporation
 Columbus, OH 43215

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FACILITY PLAN

January 2025

Fig. 2

Path: C:\Users\jhanse\OneDrive - GEI Consultants, Inc\Documents\GIS_Work\MISC\CELLAR\2024\2407654 ADP Legacy CCR SI Inspection\2407654 ADP Legacy CCR SI Inspection.aprx

Figure 3 – Site Plan



LEGEND:

 General Observation

NOTES:

1. Aerial image obtained from USDA NAIP. Image captured fall of 2022.
2. Points shown represent site conditions during time of inspection. Conditions may change overtime, accuracy is not guaranteed. Map should not be used for measurement.



2024 East Fly Ash Pond Inspection
 Kanawha River Power Plant
 Hansford, West Virginia

American Electric Power Service Corporation
 Columbus, OH 43215



Project 2407654

January 2025

SITE PLAN

Fig. 3

Figure 4 – Items to be Monitored



LEGEND:

 Monitor

NOTES:

1. Aerial image obtained from USDA NAIP. Image captured fall of 2022.
2. Points shown represent site conditions during time of inspection. Conditions may change overtime, accuracy is not guaranteed. Map should not be used for measurement.



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 Kanawha River Power Plant
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 Columbus, OH 43215



ITEMS TO BE MONITORED

Project 2407654

January 2025

Fig. 4

Figure 5 – Items to be Addressed



LEGEND:

● Repair

NOTES:

1. Aerial image obtained from USDA NAIP. Image captured fall of 2022.
2. Points shown represent site conditions during time of inspection. Conditions may change overtime, accuracy is not guaranteed. Map should not be used for measurement.



2024 East Fly Ash Pond Inspection
 Kanawha River Power Plant
 Hansford, West Virginia

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 Columbus, OH 43215



Project 2407654

ITEMS TO BE ADDRESSED

January 2025

Fig. 5

Appendix A - Photolog

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH NO: 1	DATE: October 15, 2024 8:23 AM	LATITUDE: 38.2052376	LONGITUDE: -81.41540835
DIRECTION: 27°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Toe. Riprap Coverage, General Photo, Typical Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH NO: 2	DATE: October 15, 2024 8:24 AM	LATITUDE: 38.20503185	LONGITUDE: -81.414017
DIRECTION: 112°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Toe. Riprap Coverage, General Photo, Typical Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH NO: 3	DATE: October 15, 2024 8:25 AM	LATITUDE: 38.20511924	LONGITUDE: -81.4125599
DIRECTION: 156°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Toe. Riprap Coverage, General Photo, Typical Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH NO: 4	DATE: October 15, 2024 8:27 AM	LATITUDE: 38.20529889	LONGITUDE: -81.4096075
DIRECTION: 176°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Toe. Riprap Coverage, General Photo, Typical Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH NO: 5	DATE: October 15, 2024 8:33 AM	LATITUDE: 38.20451903	LONGITUDE: -81.409609
DIRECTION: 55°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. General Photo, Typical Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH NO: 6	DATE: October 15, 2024 8:35 AM	LATITUDE: 38.20444611	LONGITUDE: -81.4097488
DIRECTION: 54°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Ground Cover, Typical Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH NO: 7	DATE: October 15, 2024 8:39 AM	LATITUDE: 38.20440965	LONGITUDE: -81.40979113
DIRECTION: 353°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. General Photo, Typical Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH NO: 8	DATE: October 15, 2024 8:45 AM	LATITUDE: 38.20419036	LONGITUDE: -81.41131974
DIRECTION: 10°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Toe. Ground Cover Riprap, Typical Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH NO: 9	DATE: October 15, 2024 8:46 AM	LATITUDE: 38.2039017	LONGITUDE: -81.41363549
DIRECTION: 359°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Toe. Ground Cover Riprap, Typical Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH NO: 10	DATE: October 15, 2024 8:49 AM	LATITUDE: 38.20377294	LONGITUDE: -81.41537027
DIRECTION: 318°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Ground Cover, Monitor Conditions. Previously repaired erosion.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH No: 11	DATE: October 15, 2024 8:50 AM	LATITUDE: 38.20374402	LONGITUDE: -81.41533356
DIRECTION: 104°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Other, Monitor Conditions. Previously repaired erosion area.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH No: 12	DATE: October 15, 2024 8:51 AM	LATITUDE: 38.20376201	LONGITUDE: -81.4155972
DIRECTION: 81°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Ground Cover, Monitor Conditions. Previously repaired erosion area.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH No: 13	DATE: October 15, 2024 8:54 AM	LATITUDE: 38.20378878	LONGITUDE: -81.41570883
DIRECTION: 286°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. General Photo, Typical Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH No: 14	DATE: October 15, 2024 8:59 AM	LATITUDE: 38.20367094	LONGITUDE: -81.41597274
DIRECTION: 293°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Slide, Slough, Scarp, Monitor Conditions. Photo is hard to get - area of a significant erosion channel - somewhat healed but needs monitoring.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH No: 15	DATE: October 15, 2024 9:00 AM	LATITUDE: 38.20364359	LONGITUDE: -81.4159944
DIRECTION: 294°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Slide, Slough, Scarp, Monitor Erosion issues.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH No: 16	DATE: October 15, 2024 9:02 AM	LATITUDE: 38.20371381	LONGITUDE: -81.41603427
DIRECTION: 303°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Major Erosion, Please Repair.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH No: 17	DATE: October 15, 2024 9:03 AM	LATITUDE: 38.20370112	LONGITUDE: -81.41603644
DIRECTION: 314°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Major Erosion, Please Repair.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH No: 18	DATE: October 15, 2024 9:04 AM	LATITUDE: 38.20372133	LONGITUDE: -81.4160744
DIRECTION: 301°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Sink Hole and Erosion, Please Repair.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH No: 19	DATE: October 15, 2024 9:05 AM	LATITUDE: 38.20376727	LONGITUDE: -81.41616675
DIRECTION: 96°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Major Erosion, Please Repair.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH No: 20	DATE: October 15, 2024 9:06 AM	LATITUDE: 38.20374408	LONGITUDE: -81.41634537
DIRECTION: 111°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Major Erosion, Please Repair.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH No: 21	DATE: October 15, 2024 9:06 AM	LATITUDE: 38.20375949	LONGITUDE: -81.41644462
DIRECTION: 96°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Major Erosion, Please Repair.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH No: 22	DATE: October 15, 2024 9:10 AM	LATITUDE: 38.2037161	LONGITUDE: -81.41657701
DIRECTION: 295°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Major Erosion, Please Repair. Downed tre.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH No: 23	DATE: October 15, 2024 9:11 AM	LATITUDE: 38.2037037	LONGITUDE: -81.41657955
DIRECTION: 315°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Slide, Slough, Scarp, Please Repair. Downed tree.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH No: 24	DATE: October 15, 2024 9:14 AM	LATITUDE: 38.20371848	LONGITUDE: -81.41670213
DIRECTION: 115°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Slide, Slough, Scarp, Monitor Conditions. Settlement of former repair.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
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PHOTOGRAPH No: 25	DATE: October 15, 2024 9:15 AM	LATITUDE: 38.20375586	LONGITUDE: -81.41672523
DIRECTION: 328°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Sink Hole, Monitor Conditions. Settlement of rip rap.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH No: 26	DATE: October 15, 2024 9:20 AM	LATITUDE: 38.20366235	LONGITUDE: -81.41678676
DIRECTION: 311°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Sink Hole, Monitor Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			

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Project: Kanawha East Fly Ash Pond Inspection Report
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PHOTOGRAPH No: 27	DATE: October 15, 2024 9:20 AM	LATITUDE: 38.20366082	LONGITUDE: -81.41679212
DIRECTION: 48°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Sink Hole, Monitor Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH No: 28	DATE: October 15, 2024 9:23 AM	LATITUDE: 38.20392858	LONGITUDE: -81.41681352
DIRECTION: 308°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Riprap, General Photo, Typical Conditions.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power **GEI Project:** 2407654

PHOTOGRAPH No: 29	DATE: October 15, 2024 9:24 AM	LATITUDE: 38.20382418	LONGITUDE: -81.41710027
DIRECTION: 54°		SITE LOCATION: HANSFORD, WEST VIRGINIA	
DESCRIPTION: Outlet Works. Stormwater outlet. Typical.			
PHOTO BY: GEI CONSULTANTS, INC.			
PHOTOGRAPH No: 30	DATE: October 15, 2024 9:32 AM	LATITUDE: 38.20371535	LONGITUDE: -81.4146265
DIRECTION: 318°		SITE LOCATION: HANSFORD, WEST VIRGINIA	
DESCRIPTION: Downstream Slope. Major Erosion, Please Repair.			
PHOTO BY: GEI CONSULTANTS, INC.			

Photographic Log



Project: Kanawha East Fly Ash Pond Inspection Report
Client: American Electric Power

GEI Project: 2407654

PHOTOGRAPH No: 31	DATE: October 15, 2024 9:33 AM	LATITUDE: 38.20368139	LONGITUDE: -81.41463335
DIRECTION: 294°	SITE LOCATION: HANSFORD, WEST VIRGINIA		
DESCRIPTION: Downstream Slope. Major Erosion, Please Repair.	 A photograph showing a steep, eroded downstream slope. The soil is exposed and appears to be a mix of brown and tan colors. There is significant erosion, with large clumps of soil and exposed roots. The slope is covered with dense green vegetation, including trees and shrubs, some of which are leaning over the eroded area. The background shows more trees and a clear sky.		
PHOTO BY: GEI CONSULTANTS, INC.			