2025 Annual Landfill Inspection Report

Landfill

Mitchell Plant

Wheeling Power Company

Moundsville, West Virginia

August 2025

Prepared for: Wheeling Power Company – Mitchell Plant

Prepared by: American Electric Power Service Corporation

1 Riverside Plaza

Columbus, OH 43215

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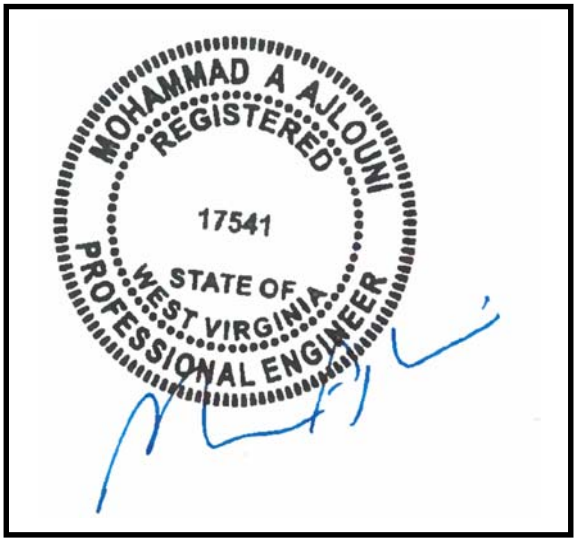
PREPARED BY _____ DATE 8/19/2025
Mohammad A. Ajlouni, Ph.D.,P.E.

REVIEWED BY _____ DATE 8/21/2025
Shahriyar S. Baig, P.E.

APPROVED BY _____ DATE 9/30/2025
Daniel W Pizzino, P.E.
Director – Civil Engineering



I certify to the best of my knowledge, information and belief the information contained in this report meets the requirements of 40 CFR § 257.84(b).

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1. Introduction

This report was prepared by AEP- Geotechnical Engineering Services (GES) section, in part, to fulfill requirements of 40 CFR 257.84 and to provide the Mitchell Plant an evaluation of the facility.

Dr. Mohammad Ajlouni, P.E. performed the 2025 inspection of the Landfill at the Mitchell Plant. This report is a summary of the inspection and an assessment of the general condition of the facility. Mr. Dennis C Henderson was the Plant contact and was present for the inspection. The inspection was performed on July 23, 2025. Weather conditions were sunny, and the temperature was in the upper 80's (°F). There was 0.65 inches of rainfall in the area over the seven days prior to the inspection. Most of the landfill outer slopes had been recently mowed.

The Mitchell Power Generating Plant is located near Moundsville, West Virginia as shown on Figure 1 – Site Location Map. The Landfill and its accessory structures are shown on Figure 2 – Facility Plan.

2. Description of Landfill

The Mitchell Landfill is a lined valley fill landfill with a leachate collection system and three separate phases (Phase 1, Phase 2, and Phase 3). The landfill leachate system is designed flow to the south end (downhill) of the landfill area. Leachate is then pumped uphill to a detached leachate collection pond on top of an adjacent ridgeline.

Phase 3 is actively receiving CCR materials while Phases 1 and 2 are temporarily covered. Chimney drains constructed out of bottom ash material inside the Phase 3 area. These bottom ash chimney drains are connected to the leachate collection system to handle contact stormwater on the landfill active area. Temporary clay berms exist immediately to the south of Phases 1, 2, and 3.

Leachate collection pipes for Phase 1, Phase 2, and Phase 3 flow by gravity to the south and discharge into a concrete sump. Leachate water is then pumped to the leachate collection pond for recirculation back to the plant.

Non-contact stormwater from the north end of the site is directed to the west sedimentation pond. Non-contact storm water from the east end of the site is directed to the east sedimentation pond. Non-contact storm water from the south end of the site is directed to the south sedimentation pond.

3. Review of Available Information (257.84(b)(1)(i))

A review of available information regarding the status and condition of the landfill which include files available in the operating record, such as design and construction information, previous 30-day inspection reports, and previous annual inspections have been conducted. Based on the review of the data there were no signs of actual or potential structural weakness or adverse conditions.

4. Inspection

4.1 Changes in Geometry Since Last Inspection (257.84(b)(2)(i))

There were no changes in the geometry of the landfill since the 2024 annual inspection.

4.2 Volume

The total volume of CCR material disposed at the landfill through July 2025 is summarized in the table below. This is based on information from previous annual inspection reports and information received from Mitchell Plant personnel.

CCR Description	Pre-2020	2020	2021	2022	2023	2024	2025*	Total
Fly Ash	1,640,377	150,949	257,203	175,990	193,730	219,266	77,389	2,714,904
Bottom Ash	86,926	14,295	27,599	250,006	91,462	69,186	6,208	545,682
Soil	20,212	5,744	7,391	7,100	14,069	4,314	395	59,225
CPS Cookies	29,047	7007	71,356	9,908	5,439	6,300	2,297	131,354
Gypsum	34,241	1,400	652	35,881	1,314	293	174	73,955
Combined	1,810,803	179,395	364,201	478,885	306,014	299,359	86,463	3,525,120

*= From January 2025 through June 31, 2025.
**= Bottom ash used for construction and not considered part of disposal quantities.

4.3 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.

4.4 Visual Inspection (257.84(b)(1)(ii))

A visual inspection of the landfill was conducted to identify any signs of distress or malfunction of the landfill and appurtenant structures. Specific items inspected included structural elements of the landfill perimeter berms, landfilled CCR material, drainage features, storm water ponds, leachate ponds, open cells, and accessories such as chimney drains and underdrains.

Overall, the facility is in good condition. The landfill is functioning as intended with no signs of structural weakness or conditions which are disrupting to the safe operation of the landfill. Inspection photos are included in Attachment A - Photolog.

1. The temporary cover on Phase 1 and Phase 2 is satisfactory. The vegetation is maintained to 12-inches or less and there was no ponding water as shown in Photograph 1 and Photograph 2. Minor erosion of the temporary cover, north of Phase 1 as shown in Photograph 1 and Photograph 3.

2. The Phase 3 active area is in satisfactory condition. The material is being placed in accordance with fill progression plan and chimney drains were functioning as they were designed as shown in Photographs 4 and 5. The minor erosion observed in last year's inspection in the Phase 3 western and eastern stormwater ditches were ~~fixed~~ as shown in Photograph 6 and Photograph 7.

3. The upstream and downstream slopes of the South Pond were in satisfactory condition. The vegetation on the downstream slope was healthy and no erosion was observed as shown in Photograph 8. The upstream slope was covered with riprap and the vegetation was generally maintained to less than 12-inches as shown in Photograph 9. The South Pond outlet structure was in good condition and the trash rack was free of obstructions as shown in Photograph 10.

4. The leachate collection pond was in good condition and operating with at least 2-feet of freeboard. No rips or tears were observed in the exposed geomembrane as shown in photographs 11 and 12.

5. At the time of inspection, the clay berm south of Phase 3 was recently mowed with good established grass cover except for the recently raised area and at the locations of the erosion fixes as shown in photograph 13.

5. Summary of Findings

5.1 General Observations

The following general observations were identified during the visual inspection:

1. In general, the landfill is functioning as its design intended. The fill progression plan is being followed that maintains a sloped CCR surface that drains towards the bottom ash chimney drains that conveys the contact water to the leachate collection system.

2. The plant is performing regular maintenance and inspections. Vegetation is well established on the landfill temporary cover and downstream slopes of the ponds.

3. Site drainage is generally functioning per the design with no blockages observed on any drainage structure or conveyance.

5.2 Maintenance Considerations

The maintenance items are provided for consideration:

1. Continue routine mowing of the temporary cover.

2. Continue to check site drainage features such as culverts, ditches, and outfall structures for debris/blockages to allow the site stormwater to flow as it was designed.

5.3 Items to Be Addressed

The following items were identified during the visual inspection as items to be addressed Figure 3:

1. Item No. 1 – Address minor erosion in the interim cover minor erosion

2. Item No. 2 –Maintain vegetation at the recently raised area of the Clay berm and at the locations of the erosion fixes.

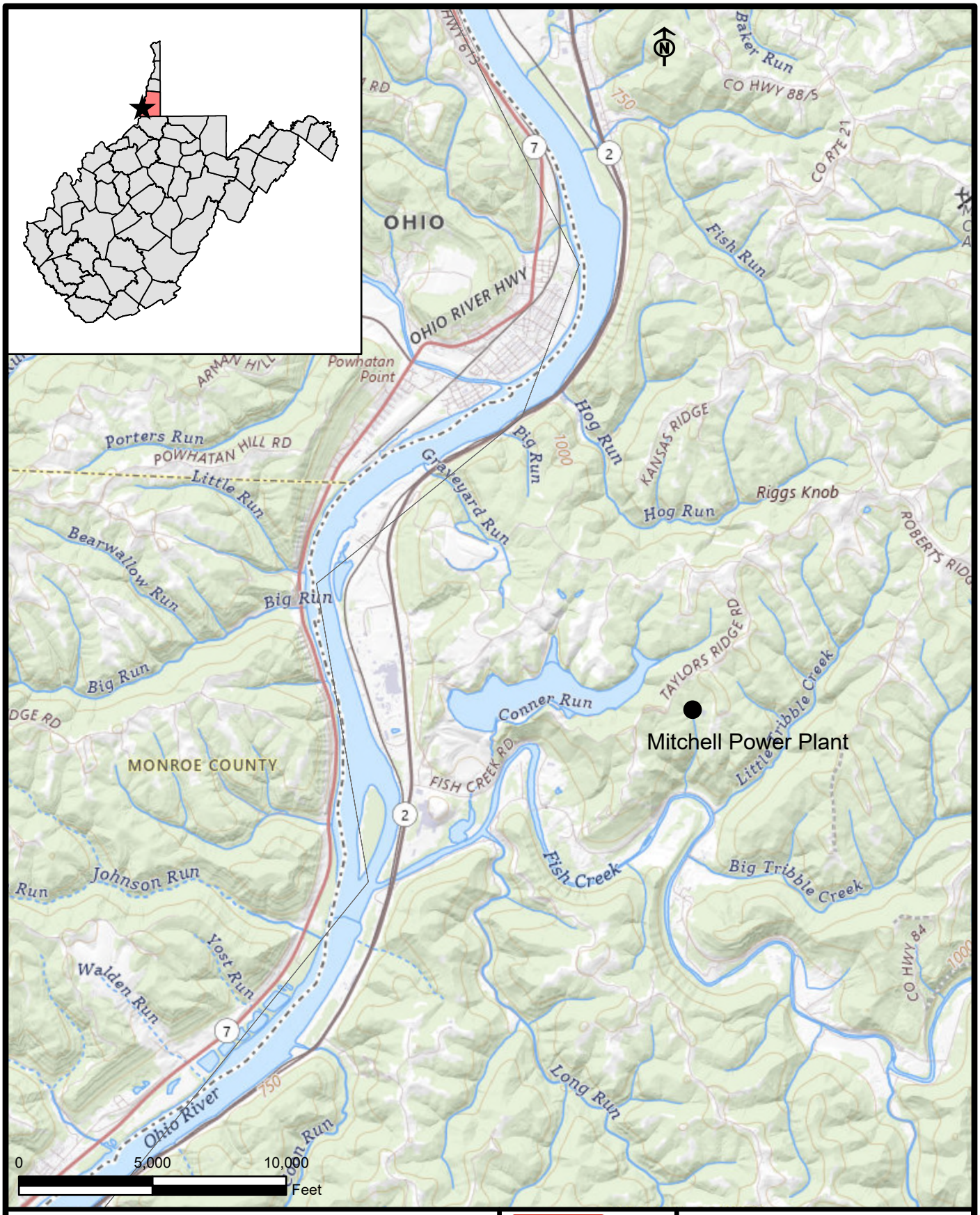
6. Deficiencies (257.84(b)(2)(iii))

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 Mohammad Ajlouni at 614-716-2939 or Dan Pizzino 614-716-1472.

Figures



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Marshall County, West Virginia

American Electric Power Service Corporation
Columbus, OH 43215

AMERICAN ELECTRIC POWER
BOUNDLESS ENERGY™

SITE LOCATION MAP

August 2025

Fig. 1

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FACILITY PLAN

August 2025

Fig. 2

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AMERICAN ELECTRIC POWER
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ITEMS TO BE ADDRESSED

August 2025 Fig. 3

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Appendix A

Photolog

Mitchell Landfill
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Mitchell Plant, Moundsville, West Virginia
August 19, 2025

Photo No. 1 Description: General Conditions: temporary soil cover Location: Phase 1 Recommendations: N/A.	
Photo No. 2 Description: General Conditions: temporary soil cover Location Phase 2. Recommendations: N/A.	
Photo No. 3 Description: Interim Cover minor erosion Location: north of phase 1. Recommendations: Address minor erosion before it becomes significant.	

Photo No. 4 Description: General Conditions: Fly ash placement in phase 3. Location: Floor area of Phase 3. Recommendations: N/A.	
Photo No. 5 Description: General Conditions: Location: left edge of west inboard slope of Phase 3 Recommendations: N/A	
Photo No. 6 Description: Minor erosion observed in last year's inspection was fixed. Location: Mitchell Landfill Phase 3. Western Storm Runoff Perimeter Ditch. Recommendations: None.	

Photo No. 7 Description: Minor erosion observed in last year's inspection was repaired. Location: Mitchell Landfill Phase 3. Eastern Storm Runoff Perimeter Ditch. Recommendations: None.	
Photo No. 8 Description: Ground Cover, Typical Conditions. Location: South Pond Downstream Slope. Ground Cover, Typical Conditions. Recommendations: None.	
Photo No. 9 Description: Typical Conditions. Location: South Pond. Recommendations: None.	

Photo No. 10 Description: Decant Structure and Trash Rack working in good condition. Location: South Pond. Decant Structure and Trash Rack working in good condition. Recommendations: None	
Photo No. 11 Description: Exposed geosynthetics in good condition. Location: Leachate Collection Pond. Exposed geosynthetics in good condition. Recommendations: None	
Photo No. 12 Description: Exposed geosynthetics in good condition. Location: Leachate Collection Pond. Exposed geosynthetics in good condition. Recommendations: None	

Photo No. 13 Description: Clay Berm vegetation. Location: Phase 3. Recommendations: maintain vegetation growth for recently raised area and at the locations of the erosion fixes