2025 Rockport Landfill Annual Inspection Report

Landfill

Rockport Plant

Indiana Michigan Power Company

Rockport, Indiana

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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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1.0 INTRODUCTION

This report was prepared by AEP- Geotechnical Engineering to provide an annual engineering evaluation of the Rockport Landfill and to fulfill requirements of 40 CFR 257.84.

The inspection was conducted by Mr. Mazin Al-Zou'bi and Mr. Shahriyar Baig from AEP Geotechnical Engineering. Mr. Lance Gogel, the landfill supervisor for the Plant, served as the facility contact. The inspection was performed on August 13, 2025. During the inspection, ambient temperatures ranged from 71°F to 88°F under mostly clear skies with a few scattered clouds, abundant sunshine, and dry ground conditions. A total of 0.40 inches of rainfall was recorded in the ten days preceding the inspection with approximately 0.06 inches of rain on August 4, 2025, followed by an additional 0.34 inches on August 12, 2025.

The last annual engineering inspection of the Rockport Landfill was completed on June 5, 2024.

2.0 DESCRIPTION OF LANDFILL

The overall features of the landfill were categorized into the following components as a means of organizing the inspection and reporting:

- Closed Landfill Area
- 2015 Landfill Construction Area (Cells 1A, 1B, 2, and 3)
- 2016 Landfill Construction Area (Cell 5 and 4A)
- Inactive Landfill Areas (Cells 4B, 6, and 7)
- Leachate Ponds
- Storm Water Drainage Ditches

These features, along with the approximate boundaries of each area, are illustrated in Figure1.

The Closed Landfill Area is located on the east and south sides of the landfill as shown in Figure 1. This area of the landfill was constructed between 1985 and 1987 and was used for disposal of Type II ash. The area was closed and final cover was placed between 2000 and 2007. The final cover consists of twenty-four (24) inch thick compacted clay cover and a six (6) inch thick topsoil cover to support vegetation.

The 2015 Landfill Construction Area (Cells 1A, 1B, 2 and 3) was completed in 2015 in order to dispose of the Type I Dry Sorbent Injection Ash. Waste placement in the western portion (Cells 1B, 2, & 3) is operationally complete and temporary cover has been installed over the area. Active waste placement is ongoing in Cell 1A and progressing north.

The 2016 Landfill Construction Area (Cell 5 and 4A) was completed in 2016. A portion of this cell was built over the slope of the previously filled Type II landfill area and a perimeter berm construction along the eastern edge of Cell 5 is tied into the existing landfill cap. A soil and vegetative cover were placed over the entire area in 2017. Temporary cover has been removed from Cell 5 and Cell 4A, and both cells are now part of the active waste placement operations.

Cell 4B, Cell 6, and Cell 7 are Inactive Landfill Areas. They consist of a perimeter berm with Type II soil liner and were constructed between 2012 to 2014. These areas are reserved for future composite liner construction.

Filling operations are completed in phases, that span multiple cells. Phase 1 is the previously filling area located in the southwest area of the landfill and consists of previously constructed Cell 1B, Cell 2, and Cell 3. The south and west sides of Phase 1 have permanent containment berm with perimeter drainage channels along the outboard side of the berm. Along the north side of the Phase 1 area is a temporary access road

with drainage channel adjacent to the temporary containment berm. The channel directs stormwater flow to the west to a perimeter drainage channel. Phase 1 is presented on the attached Figure 1.

Phase 2 is active filling area located in the eastern part of the landfill and consists of previously constructed Cell 1A and parts of Cell 4A and Cell 5. This phase extends north-south across the entire landfill footprint. The east side of this phase is previously closed landfill area that is graded away from Phase 2 area radially to the north, east, and south. The north side has a permanent containment berm and perimeter channel while the south side is closed landfill slope that incorporates final graded drainage channel benches. Along the west side is a temporary containment berm and the area to the west is graded-landfill areas with temporary cover that slope to the north and west away from the Phase 2 area.

According to available documentation and records, Phase 1 ceased accepting waste in Fall 2022. Phase 2 began receiving waste in August 2022.

3.0 REVIEW OF AVAILABLE INFORMATION (257.84(B)(1)(I))

A review of available information regarding the status and condition of the CCR Landfill which include files available in the operating record, such as design and construction information, previous 7-day inspection reports, and previous annual inspections has been conducted.

4.0 INSPECTION (257.84(B)(1)(II))

4.1 Changes in Geometry Since Last Inspection (257.84(B)(2)(I))

No modifications have been made to the geometry of the Landfill since the 2024 annual inspection. The geometry of the landfill has remained essential unchanged, except for the changes in topography of the Phase 2 active landfill areas (i.e. Cell 1A and parts of Cell 4A and Cell 5) due to placement of ash.

4.2 Volume (257.84(b)(2)(ii))

Based on data provided by the Rockport Plant and the landfill operations team, the total quantity of ash disposed at the landfill as of the August 13, 2025, inspection date is estimated at 8,854,782 tons. Applying an airspace utilization factor of 1.15 tons per cubic yard, this corresponds to approximately 7,699,810 cubic yards of Type I and Type II ash.

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, 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 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 identified as a deficiency are considered routine maintenance items or items to be monitored.

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

1. Uncontrolled Seepage (Leachate Outbreak)
   Leachate outbreak is the uncontrolled release of leachate from the landfill.
2. Displacement of the Embankment
   Displacement of the embankment is large scale movement of part of the landfill or perimeter berm. 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 all structural elements of the landfill perimeter berms, temporary and final covers, drainage features, leachate ponds, open cells, and appurtenances such as chimney drains etc.

Based on our visual inspection, the CCR Landfill is in good condition with no signs of potential structural weakness or conditions which are disruptive to its safe operation. Details of the visual inspection are presented below. Inspection photographs are included in Attachment B: Photographic Documentation Log. Additional images captured during the inspection are available upon request.

4.4.1 Closed Landfill Area

1. The Closed Landfill (Type II Liner) was in good condition. The vegetative cover was well established, controlled with mowing, and in good condition with no apparent signs of erosion or

seepage (Photographs 1, 2, 3 and 4).

4.4.2 2015 Landfill Construction Area (Cell 1A, 1B, 2, and 3)

1. Cells 1A, 1B, 2 and 3 were generally in good condition. The vegetative cover was well established and controlled with mowing (Photographs 5 and 6).

2. Stormwater features (riprap down-chutes and culverts) were unobstructed (Photographs 7 and 8).

4.4.3 2016 Landfill Construction Area (Cell 5 and 4A)

1. A significant amount of surface water was observed standing in the east portion of Cell 4A, indicating that the leachate collection system may not be effectively draining contact water in accordance with specifications for that section of the active landfill area (Photographs 9, 10, 11 and 12).

2. External pumps were installed and utilized to transfer contact water from Phase 2 to the North Leachate Pond (Photographs 13 and 14).

3. Unloading and disposal of soils and waste materials were observed within the Phase 2 areas (Photographs 15 and 16).

4.4.4 Inactive Landfill Areas (Cell 4B, 6, and 7)

1. The inactive landfill cells 4B, 6, and 7 were in good condition. The vegetative cover was well established and in good condition with no apparent signs of erosion or seepage (Photographs 17 and 18).

4.4.5 Leachate Ponds

4.4.5.1 West Leachate Ponds Complex

1. The Concrete Basin within the West Pond Complex was observed to be in good condition, with only a few minor longitudinal and transverse hairline cracks observed. Additionally, the leachate influent line was flowing at the time of inspection (Photograph 19).
2. The LLDPE-lined West Pond within the West Pond Complex was observed to be in good condition, with no visible signs of liner degradation or damage (Photograph 20).
3. The LLDPE-lined 002 Outfall Pond within the West Pond Complex was observed to be in good condition, with no visible signs of liner degradation or damage (Photograph 21).
4. The riprap on the exterior slopes of the LLDPE-lined 002 Outfall Pond within the West Pond Complex appeared to be in good condition (Photograph 22).
5. Few minor cracks were noted in the above-grade concrete thrust blocks connected to the eastern influent lines. (Photograph 23).
6. The safety fence surrounding the leachate West Pond Complex was in good condition (Photograph 24).

4.4.5.2 North Leachate Ponds Complex

1. The signs at the fence near the entrance gate of the North Pond Complex have significantly faded, making the text nearly illegible. It is recommended that the signage be replaced or restored to clearly display all required information. (Photograph 25).
2. The fence surrounding the leachate North Pond Complex was in good condition (Photograph 26).
3. The Concrete Basin within the North Pond Complex was observed to be in good condition, with no signs of significant structural damage. Some longitudinal and transverse hairline cracks were present (Photograph 27).

4. The North Pond within the North Pond Complex was generally observed to be in good condition, with no indications of significant structural damage (Photographs 28).

4.4.6 Storm Water Drainage Ditches

1. The perimeter ditches along the West and South sides were observed to be in good condition, with no evidence of erosion or blockage (Photos 29, 30, 31 and 32).

4.5 Changes that Effect Stability or Operation (257.84(b)(2)(iv))

Based on the inspection, interviews with plant personnel, and a review of field observations, no changes have occurred at the landfill since the last annual inspection that would impact its stability.

5.0 SUMMARY OF FINDINGS

5.1 General Observations

The following general observations were identified during the visual inspection:

In general, the overall CCR features of the Landfill are in good condition and functioning as the design intended.

5.2 Maintenance Items

The following actions are recommended to ensure continued functionality and compliance of the landfill systems:

1. Perform regular mowing of grass-covered areas in accordance with the established schedule to preserve the integrity of the landfill cover.
2. Continue routine maintenance of any erosion.
3. Clear and remove any obstructions in stormwater management features.
4. Replace or restore the signage on the fence near the entrance gate of the North Pond Complex to ensure all required information is clearly visible and legible.

5.3 items to monitor

No items have been identified for continued monitoring at this time.

5.4 Items to Be Addressed

The following item was identified as an item to be addressed:

1. The significant amount of surface water observed standing in the east portion of Cell 4A within the active landfill area.

5.5 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 7-day inspection. If any deficiency occurs until the next inspection contact AEP Geotechnical Engineering immediately.

If you have any questions regarding this report, please contact AEP-Geotechnical Engineering Mazin M AL-Zou'bi (Phone: 614-716-1806, email: mal-zoubi@aep.com) or Daniel W Pizzino (Phone: 614-716-1472, email: dwpizzino@aep.com).

Attachment A:

Figure 1 – Rockport Landfill Inspection Map 2025

N

HORIZONTAL DATUM NAD27
INDIANA WEST ZONE
VERTICAL DATUM NGVD29

BRIDGE
ENERGY RIP RAP APRONS
RIP RAP ENERGY DISSIPATER
STREAM LINE
APPROXIMATE WETLAND AREA
RIP RAP CHANNEL
MAIN HAUL ROAD
RIP RAP EMERGENCY SPILLWAY
NORTH POND
ENERGY RIP RAP APRONS
CULVERT
CULVERT
GATE
DRAINAGE DITCH
Water Observed in Landfill Cell 4A
CELL 4B
CELL 4A
CELL 5 (N)
2016 CONSTRUCTION (TYPE I LINER)
TWO 8" HDPE
CLOSED LANDFILL (TYPE II LINER)
CELL 5 (S)
LEACHATE
CULVERT
CELL 6
CELL 7
002 POND
WEST POND
GATE
CULVERT
GRAVEL HAUL ROAD
CELL 1A
RIP RAP DOWN SLOPE CHANNEL
PAVED ACCESS ROAD
GATE
GATE
GATE
MH #16
CELL 1B
CULVERT
CELL 3 TYPE I LINER)
CELL 2 (TYPE I LINER)
CLOSED LANDFILL
DRAINAGE DITCH
RIP RAP DOWN SLOPE CHANNEL
Phase 1 Boundary
Phase 2 Boundary
2015 CONSTRUCTION (TYPE I LINER)
NEW HAUL ROAD

LEGEND:

- 510 — TOPOGRAPHIC CONTOURS ASBUILT SURFACE FOR CERTIFICATION
- CLOSED LANDFILL AREA
- INACTIVE DISPOSAL AREA (TYPE 2 LINER)
- ACTIVE DISPOSAL AREA (TYPE 1 LINER)
- AREA OF TEMPORARY COVER
- APPROXIMATE LIMITS OF 2016 TYPE 1 LINER CONSTRUCTION WITH INTERMEDIATE COVER
- RIP RAP
- CONCRETE
- SURFACE WATER STREAM OR DRAINAGE CHANNEL
- CULVERT PIPE
- LEACHATE PIPE
- APPROXIMATE CELL BOUNDARY
- CONTROL POINT
- CHIMNEY DRAIN
- MH — LEACHATE MANHOLE

GRAPHIC SCALE
500 250 0 500 1000
SCALE: 1"=500'

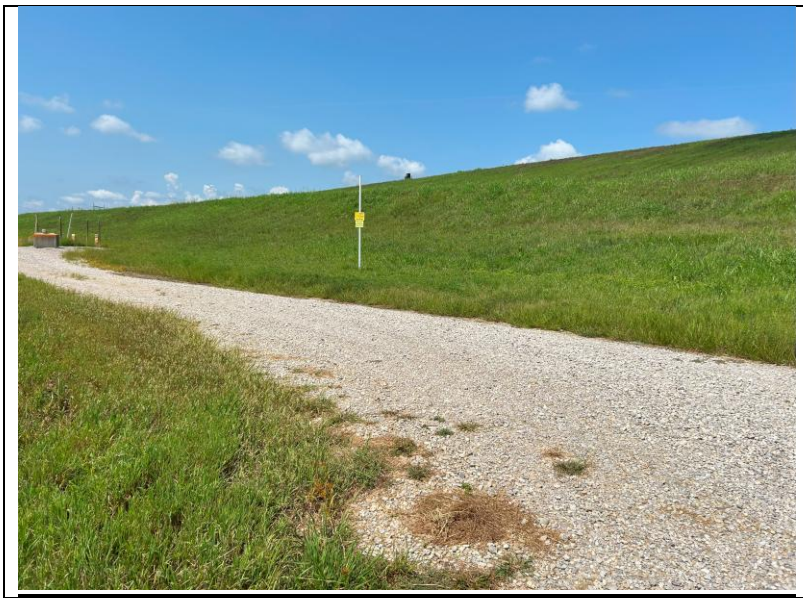
DRN BY:	GEOTECHNICAL INDIANA MICHIGAN POWER COMPANY ROCKPORT PLANT ROCKPORT INDIANA LANDFILL FIGURE 1	AEP AMERICAN ELECTRIC POWER AEP SERVICE CORP. 1 RIVERSIDE PLAZA COLUMBUS, OH 43215
DATE:		
SCALE: 1"=500'		

Attachment B:

Photographic Documentation Log

	**Photograph 1:** View of the Northeastern portion of the Closed Landfill area, located east of Control Point #1501.
	**Photograph 2:** View of the Northeastern portion of the Closed Landfill area, located east of Control Point #1501.

	**Photograph 3:** View of the northeastern portion of the closed landfill area, situated east of Control Points #1501 and #1085.
	**Photograph 4:** View of the northeastern portion of the closed landfill area, situated east of Control Points #1084 and #1085.

	**Photograph 5:** View of the Southern portion of the Closed Landfill area, located Southwest of Control Point #1084.
	**Photograph 6:** View of the Southern portion of the Closed Landfill area, located Southwest of Control Point #1084.

	**Photograph 7:** View of the Rip Rap Spillway located southwest of Control Points #1084.
	**Photograph 8:** View of HDPE (High-Density Polyethylene) pipes installed along the landfill perimeter for efficient stormwater drainage.

	**Photograph 9:** The view depicts standing contact water and the chimney drain located south of Manholes #10 and #11 within Phase 2 North. This contact water must be continuously and properly monitored, and regularly pumped out to the North Pond Complex.
	**Photograph 10:** The view depicts standing contact water and the chimney drain located south of Manholes #10 and #11 within Phase 2 North. This contact water must be continuously and properly monitored and regularly pumped out to the North Pond Complex.

	**Photograph 11:** The view depicts standing contact water and the chimney drain located south of Manholes #10 and #11 within Phase 2 North. This contact water must be continuously and properly monitored and regularly pumped out to the North Pond Complex.
	**Photograph 12:** The view depicts standing contact water and the chimney drain located south of Manholes #10 and #11 within Phase 2 North. This contact water must be continuously and properly monitored and regularly pumped out to the North Pond Complex.

	**Photograph 13:** View showing external pumps installed and in use to transfer contact water from Phase 2 to the North Leachate Pond.
	**Photograph 14:** View showing external pumps installed and in use to transfer contact water from Phase 2 to the North Leachate Pond.

	**Photograph 15:** View showing the unloading and disposal of soils and waste materials within the Phase 2 area.
	**Photograph 16:** View showing the unloading and disposal of soils and waste materials within the Phase 2 area.

	**Photograph 17:** View of the Inactive landfill cells 4B, 6, and 7 were observed to be in good condition, with well-established vegetative cover and no visible signs of erosion or seepage.
	**Photograph 18:** View of the Inactive landfill cells 4B, 6, and 7 were observed to be in good condition, with well-established vegetative cover and no visible signs of erosion or seepage.

	**Photograph 19:** Photograph showing the flow of the leachate influent line into the Concrete Basin at the West Leachate Pond Complex.
	**Photograph 20:** Overview of the LLDPE-lined West Pond located within the West Pond Complex.

	**Photograph 21:** View of the discharge structure located within the LLDPE-lined 002 Outfall Pond, part of the West Pond Complex.
	**Photograph 22:** View of the riprap on the exterior slopes of LLDPE-lined 002 Outfall Pond within the West Pond Complex appeared to be in good condition.

	**Photograph 23:** View of a crack observed in the exposed thrust block on the east side of the LLDPE-lined 002 Outfall Pond, within the West Pond Complex.
	**Photograph 24:** View showing the safety fence surrounding the West Leachate Pond Complex, which appeared to be in good condition.

	**Photograph 25:** View showing the signs mounted on the fence near the entrance gate of the North Pond Complex, which have significantly faded, rendering the text nearly illegible.
	**Photograph 26:** View showing the safety fence surrounding the North Leachate Pond Complex, which appeared to be in good condition.

	**Photograph 27:** View showing the Concrete Basin within the North Pond Complex was observed to be in good condition, with no signs of significant structural damage. Some longitudinal and transverse hairline cracks were present.
	**Photograph 28:** View showing the North Pond within the North Pond Complex was generally observed to be in good condition, with no indications of significant structural damage.

	**Photograph 29:** View showing the perimeter ditches along the West and South sides, which appeared to be in good condition with no signs of erosion or blockage.
	**Photograph 30:** View showing the perimeter ditches along the West and South sides, which appeared to be in good condition with no signs of erosion or blockage.

	**Photograph 31:** View showing the perimeter ditches along the West and South sides, which appeared to be in good condition with no signs of erosion or blockage.
	**Photograph 32:** View showing the perimeter ditches along the West and South sides, which appeared to be in good condition with no signs of erosion or blockage.