2025 Annual Dam and Dike Inspection Report

East Bottom Ash Pond and West Bottom Ash Pond

Rockport Plant

Indiana Michigan Power Company

Rockport, Indiana

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Prepared for: Indiana Michigan Power Company – Rockport Plant

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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 § 257.83(b).

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1.0 INTRODUCTION

This report was prepared by AEP- Geotechnical Engineering Services to provide an annual engineering evaluation for the Rockport Plant as part of the Dam and Dike Inspection and Maintenance Program (DIMP) and to fulfill the requirements of 40 CFR 257.83 for the CCR impoundments. For site location refer to Figure 1. It includes inspection findings, observations, photographic descriptions, conclusion and recommendations. The focus of this inspection report is the CCR ponds that comprise the Bottom Ash Pond Complex which specifically are the East Bottom Ash Pond (EBAP) and West Bottom Ash Pond (WBAP), see Figure 2 of Attachment A. Please note that the East Wastewater Pond, West Wastewater Pond, Reclaim Pond, and Clearwater Pond are excluded from this report as they are non-CCR ponds and have a separate inspection report.

During the inspection, Mr. Lance Gogel, Landfill Supervisor for the Plant, served as the facility's contact. The inspection was conducted by Shah Baig and Mazin Al Zou'bi of AEP Geotechnical Engineering performed the inspection on August 12, 2025. Weather conditions at the time of the inspection were cloudy, with rain, and temperatures were approximately 70°F. Rainfall was measured to be about 0.34 inches on the day of inspection with no recorded over the seven days prior to the inspection.

The last annual engineering inspection was conducted on June 5, 2024.

2.0 DESCRIPTION OF IMPOUNDMENTS

2.1 WEST BOTTOM ASH POND (WBAP)

The WBAP dike is approximately 2,000 feet long and has a maximum height of 13 feet (as measured from interior toe) with a design crest width of 30 feet. The dike is a compacted soil earthen embankment. The top of the dike is at elevation 399.0 feet with the natural ground surface beneath the dikes at about elevation 390 feet. The exterior side slope of the embankment fill is designed to be 2.5(H) to 1(V) that transitions to 3(H) to 1(V). The interior design side slopes are 2(H) to 1(V). The bottom elevation of the WBAP is at elevation 386 ft msl with a minimum operating pool elevation of 394 ft msl providing a CCR storage capacity of 211 ac-ft. All CCR

and miscellaneous wastewater flows have been redirected away from the West Bottom Ash Pond and only runoff is collected in the pond. The closure of the WBAP involving the removal of the CCR materials is currently underway.

2.2 EAST BOTTOM ASH POND (EBAP)

The EBAP is an incised pond with the surrounding ground at elevations above 399 ft mean seat level (msl). The splitter dike which separates the EBAP and WBAP spans approximately 2,000 feet in length and has a maximum height of 22 feet, as measured from the top of dike to the base of the EBAP. Constructed from compacted cohesive soil, the dam has design slopes of 2H: 1V. The bottom elevation of the EBAP is 377 ft msl with a minimum operating pool elevation of 391 ft msl allowing for a CCR storage capacity of 337 ac-ft.

In 2022 and 2023, all CCR materials were removed from the EBAP along with 12-inches of underlying soil to ensure complete removal of CCR material. The EBAP was subsequently retrofitted with the geosynthetic liner system (40-mil LLDPE geomembrane, GCL, and 10-mil non-woven geotextile). The retrofit project also included installing a splitter dike to separate the forebay area from the rest of the EBAP. The forebay and splitter dike were covered with fabriform over the 40-mil LLDPE liner.

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 EBAP and WBAP, including files available in the operating record, was conducted. Available information consists of design and construction information, previous structural stability assessments, previous 7-day inspection reports, and previous annual inspection reports. Based on the findings of the current visual inspection and the review of the available data, it is concluded that there were no signs of actual or potential structural weakness or adverse conditions and that the facility is performing as intended in the design documents.

On September 18, 2024, a deficiency was recorded regarding concrete and liner damage at the EBAP Forebay. The concrete revetment beneath the discharge pipes in the East Bottom Ash Pond has experienced erosion, which in turn has compromised the integrity of the underlying liner system. In response, a Deficiency Corrective Measures Plan was developed and remediation efforts are currently underway.

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

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

No modifications have been made to the geometry of the main dikes of the EBAP and WBAP since the last annual engineering inspection.

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

There is no instrumentation at the EBAP or WBAP.

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.

Table 1: IMPOUNDMENT CHARACTERISTICS: Bottom Ash Ponds

	West Bottom Ash Pond	**East Bottom Ash Pond**
Approximate **Minimum** depth (elevation) of impounded water since last annual inspection	0 ft (386 ft msl)	14 ft. (391 ft msl)
Approximate **Maximum** depth (elevation) of impounded water since last annual inspection	0 ft. (386 ft msl)	18.6 ft. (395.6 ft msl)
Approximate **Present** depth of impounded water at the time of the inspection	0 ft. (386 ft msl)	18.6 ft. (395.6 ft msl)
Approximate **Minimum** depth (elevation) of CCR since last annual inspection	0 ft. (386 ft msl)	0 ft. (NA)
Approximate **Maximum** depth (elevation) of CCR since last annual inspection	2 ft. (388 ft msl)	2.5 ft. (381 ft msl)
Approximate **Present** depth (elevation) of CCR at the time of the inspection	Varies (closure by removal in progress)	1 ft. (378 ft msl)
Storage Capacity of impounding structure at the time of the inspection [crest el]	352 ac-ft.	500 ac-ft.
Approximate volume of impounded water at the time of the inspection	0 ac-ft.	390 ac-ft.
Approximate volume of CCR at the time of the inspection	62 ac-ft (100,000 CY)	5 ac-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 the 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 Bottom Ash Pond Complex including the EBAP and WBAP 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 Good condition. The impoundment is functioning as intended with no signs of potential structural weakness or conditions, which are disrupting to the safe operation of the impoundment. A map presenting the locations of the inspection observations (Figure 3) and inspection photos are included in Attachment B. Additional pictures taken during the inspection can be made available upon request.

<u>West Bottom Ash Pond</u>

1. The splitter dike between the two ash ponds appeared to be in good condition and showed no signs of distress (Photograph No. 1). Minor erosion was noticed at the north end of the crest that repaired previously by backfilling with stone (Photograph No. 2).
2. The West Bottom Ash Pond is currently inactive. It is de-watered and being closed by removal as shown in Photograph No. 3. The pond contents were placed in rows to facilitate drying before hauling and placement at the existing Phase 2 landfill.
3. The west dike is illustrated in Photograph No. 4. Overall, the dike is in good and stable condition with a buttress of bottom ash at the interior slope. Overgrown vegetation was observed along the crest and exterior slope.
4. Typical interior slope of the pond is illustrated in Photographs No. 5 and 6. The interior slopes showed no signs of distress such as sloughing or bulges. Minor erosion was observed at the south end of the pond.

5. The splitter dike between the two ash ponds appeared to be in good condition and showed no signs of distress (Photograph No. 7). The crest of the east dike, south section appeared in good and stable condition with no signs of distress such as settlement or ruts, and erosion.

East Bottom Ash Pond

1. The east slope of the pond is illustrated in Photograph No. 8. The crest, interior, and exterior slope of the dike appeared in good and stable condition. The gravel surface over the crest appeared in good condition without any sign of settlement or distress.
2. The interior slopes showed no signs of distress such as sloughing, bulges or erosion (Photograph No. 9). The geomembrane liner was intact and no tear or damage was noticed except the north slope where the repair was in progress. The interior slope was in good and stable condition.
3. The pond is subdivided into a Forebay for managing bottom ash. A clay dike is installed covered with fabriform liner (Photograph No. 10). The pond is functioning as designed with the splitter dike. The dike is in good and stable condition.
4. A section of the liner system of the north interior slope failed and currently been repaired. The main dike is in good and stable condition (Photograph No. 11). The sluice pipes are temporarily rerouted and extended into the pond south of the splitter dike (Photograph No. 12). Photograph No. 13 illustrate the exposed area of the interior slope where the failure occurred and has been repaired.

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

Based on interviews with plant personnel and field observations there were no changes to the EBAP or WBAP, as well as the entire Bottom Ash Pond Complex since the last annual inspection that would affect the stability of the impounding structure.

5.0 SUMMARY OF FINDINGS

5.1 GENERAL OBSERVATIONS

The outboard slopes, crest and inboard slopes and splitter dikes of the impoundments were generally in good condition. The embankment along the west side of the complex did not show any signs of structural weakness or instability. The crest did not contain any ruts, cracks, depressions or other signs of instability. Specific maintenance items and items to monitor are described in the subsequent sections of this report.

5.2 MAINTENANCE ITEMS

The following maintenance items were identified during the visual inspection, see inspection map for locations. Contact GES for specific recommendations regarding repairs:

1) Continue with the vegetation maintenance and mowing efforts at the facility.

2) Repair any ruts or erosion gullies by filling with stone or compatible material with compaction.

5.3 ITEMS TO MONITOR/INVESTIGATE

No items were identified for monitoring.

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

There is repair work currently on-going deficiency discovered in 2024 where the revetment and liner system were damaged at the north slope of the EBAP forebay. There were no additional signs of structural weakness or disruptive conditions that were observed at the EBAP and WBAP at the time of the inspection that would require additional investigation or remedial action. No additional deficiencies were identified during this inspection or any of the periodic 7-day or 30-day inspections. If a defiency is identified before the next annual inspection contact AEP Geotechnical Engineering immediately.

Attachment A

- Figure 1: Site Location Map
- Figure 2: Facility Map

FIGURE 1 – SITE LOCATION MAP
ROCKPORT POWER PLANT, ROCKPORT, IN

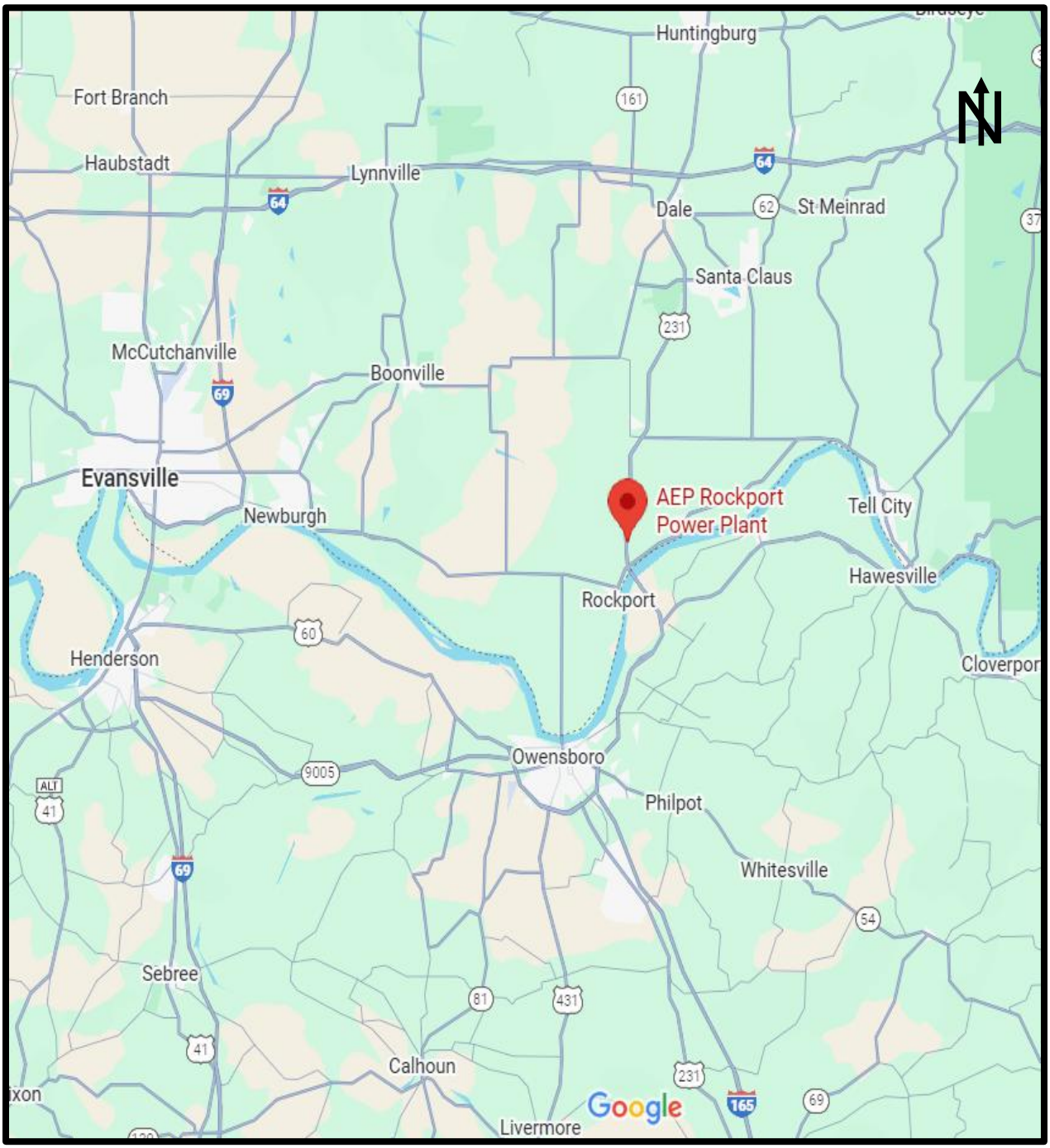

FIGURE 2 - ROCKPORT BOTTOM ASH COMPLEX MAP

Attachment B

- Figure 3: Inspection Location Map
- Inspection Photographs

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FIGURE 3 - ROCKPORT BOTTOM ASH POND INSPECTION MAP

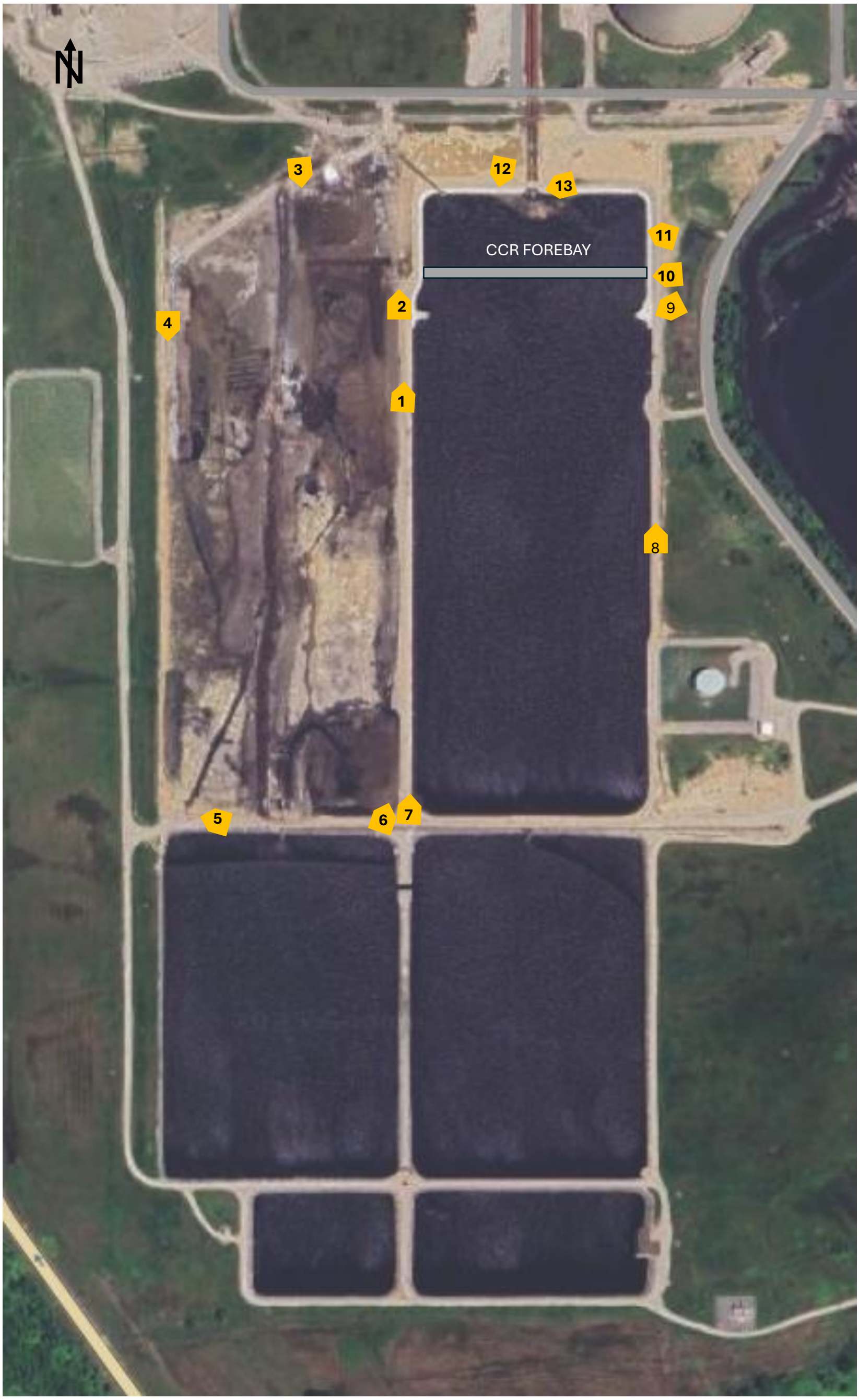

Photo # 1 East splitter dike between the East and West Bottom Ash Pond (looking north).	
Photo # 2 Minor rutting of the crest (looking south).	
Photo # 3 View of the interior of the WBAP (looking south).	

Photo # 4 West dike of the WBAP (looking south).	
Photo # 5 Minor erosion at the interior slope.	
Photo # 6 Interior slope minor erosion (looking north).	

Photo #7 East dike of the WBAP (looking north).	
Photo #8 East dike of the EBAP (looking north).	
Photo #9 Overall view of the interior of the EBAP.	

Photo #10	
Splitter dike with fabriform within the pond (looking west).	
Photo #11	
The north dike of the EBAP (looking northwest).	
Photo #12	
Ash sluice pipes at the north interior slope.	

Photo #13	
North interior slope (looking west).	