

ANNUAL INSPECTION REPORT
POWERTON STATION - FORMER ASH BASIN
JULY 2021

This Annual Inspection Report has been prepared pursuant to both Title 35 IAC Part 845 Subpart E, Section 845.540(b) and Title 40 of the Code of Federal Regulations Part 257.83(b) for Midwest Generation, LLC (MWG) at Powerton Station (Station) in Pekin, Illinois. The purpose of this project is to perform the annual inspection of the Former Ash Basin (FAB) by a licensed professional engineer to ensure that the design, construction, operation, and maintenance of the coal combustion residuals (CCR) surface impoundment is consistent with recognized and generally accepted good engineering standards. The inspection includes:

1. Review of available information regarding the status and condition of the CCR surface impoundment, including files available in the operating record (e.g., CCR surface impoundment design and construction information previous structural stability assessments, the results of inspections by a qualified person, and results of previous annual inspections);
2. Visual inspection of the CCR surface impoundment to identify signs of distress or malfunction of the CCR surface impoundment and appurtenant structures; and
3. Visual inspection of any hydraulic structures underlying the base of the CCR surface impoundment or passing through the dike of the CCR surface impoundment for structural integrity and continued safe and reliable operation.
4. Review of annual hazard potential classification certification, annual structural stability assessment certification, annual safety factor assessment certification, and inflow design flood control system plan certification.

Civil & Environmental Consultants, Inc. (CEC) completed the following scope of services in preparing this annual inspection report:

- CEC reviewed the weekly and monthly inspection reports by a qualified person employed by MWG, and the previous annual inspection report.
- CEC performed the annual inspection in accordance with the requirements of Part 845.540 and 40 CFR 257.83(b) including observations pertaining to the following:
 - Observations of changes in the FAB geometry since the previous annual inspection were documented.
 - Location and type of existing instrumentation was inspected and the maximum recorded readings of each instrument since the previous annual inspection were documented from the records provided by MWG.
 - Approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;

- Storage capacity of the impounding structure at the time of the inspection;
- Approximate volume of the impounded water and CCR at the time of the inspection;
- Any appearances of an actual or potential structural weakness of the CCR surface impoundment, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR surface impoundment and appurtenant structures; and
- Any other changes that may have affected the stability or operation of the impounding structure since the previous annual inspection.

The FAB is an inactive surface impoundment that is scheduled for closure. Approximately 30 acres in size, the FAB does not receive bottom ash or ash slag. In 2010, the FAB was sectioned into a North Pond and South Pond to accommodate a new railroad embankment and the geometry has remained unchanged since.

On June 23, 2021, CEC inspected the North and South FAB. Our observations showed no signs of distress that would suggest the stability or operation of the impounding structure is compromised.

1.0 CHANGES IN GEOMETRY

At the time of inspection, the FAB geometry was observed to be unchanged since the July 2020 inspection.

2.0 INSTRUMENTATION

Instrumentation associated with the hydraulic structures, impoundment embankments, and/or slope performance do not exist.

3.0 CAPACITY AND IMPOUNDED VOLUME

Capacity and impounded volume of the FAB and estimated depth of impounded water and CCR are represented in Table 1, attached. The volume of CCR remains unchanged from the previous investigation. FAB water volume fluctuates with the groundwater table and the surface water elevation of the nearby Illinois River. Volumes and depths were determined by reviewing inspection reports and construction drawings.

4.0 STRUCTURAL/OPERATIONAL OBSERVATIONS

CEC inspected the FAB for signs of distress that would have the potential to disrupt operation and safety. Both the North and South Ponds are partially incised minimizing the potential of a release

of CCR. CCR is primarily located within the incised area of both ponds. Our observations showed minor signs of distress however, none of which currently suggest the safety, stability, or operation of the impounding structure is compromised.

Items noted during the inspection included minor erosion, animal borrows, and vegetation, again, none of which suggest the safety, stability, or operation of the impounding structure is compromised. Review of weekly inspection records show the Station has maintained the berm and access road by removing fallen trees, filling potholes and erosion areas. Based on the extent of these findings, there are no corrective actions or remedy required.

5.0 OTHER CHANGES

CEC inspected the basin for signs of other changes or distress that would have the potential to disrupt operation and safety of the basin. Our inspection showed no distresses that would affect the operation and/or stability of the FAB.

6.0 LIMITATIONS AND CERTIFICATION

This Annual Inspection Report was prepared to meet the requirements of Section 845.540(b) and Part 257.83(b) and was prepared under the direction of Mr. M. Dean Jones, P.E.

By affixing my seal to this, I do hereby certify to the best of my knowledge, information, and belief that the information contained in this report is true and correct. I further certify I am licensed to practice in the State of Illinois and that it is within my professional expertise to verify the correctness of the information. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Seal:



Signature: 

Name: M. Dean Jones, P.E.

Date of Certification: July 13, 2021

Illinois Professional Engineer No.: 062-051317

Expiration Date: November 30, 2021

Table 1: Inspection Summary - Former Ash Basin

Category	Regulation Reference	Evaluation	Recommended Action
Change in Geometry	845 §257.83(b)(2)(i)	None	None
Instrumentation	§257.83(b)(2)(ii)	None	None
Water Depth	§257.83(b)(2)(iii)	North Pond - 13.4 feet South Pond - 15.5 feet	None
CCR Depth	§257.83(b)(2)(iii)	10 feet	None
Estimated Storage Capacity	§257.83(b)(2)(iv)	500,000 CY	None
Impounded Water Volume	§257.83(b)(2)(v)	North Pond - 9.7 Acre Feet South Pond - 22.8 Acre Feet Ground Water Elevation 444.0	None
Impounded CCR Volume	§257.83(b)(2)(v)	North Pond - 300,000 CY South Pond - 200,000 CY	None
Structural/Operational Observations	§257.83(b)(2)(vi)	Minor erosion, burrows, and vegetative cover	Continue to monitor
Other Changes	§257.83(b)(2)(vii)	None	None