

**ANNUAL INSPECTION REPORT
EAST ASH POND AND WEST ASH POND
WAUKEGAN STATION
OCTOBER 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 CFR Part 257.83(b) for the East Ash Pond and West Ash Pond at Waukegan Station (Station) in Waukegan, Illinois. The purpose of this project is to perform the annual inspection of the East and West Ash Ponds by a licensed professional engineer to ensure that the design, construction, operation, and maintenance of the coal combustion residuals (CCR) unit is consistent with recognized and generally accepted good engineering standards. 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 completed by a qualified person employed by MWG, and the previous annual inspection report.
- CEC performed the annual inspection in accordance with the requirements of 35 IAC Part 845.540 and 40 CFR 257.83(b) including observations pertaining to the following:
 - Changes in Geometry: Observations of changes in the geometry of the East and West Ash Ponds since the previous annual inspection.
 - Instrumentation: Inspection of the location and type of existing instrumentation and documentation of the maximum recorded readings of each instrument since the previous annual inspection from records provided by the Station.
 - Capacity and Impounded Volume: Inspection observations for the approximate minimum, maximum, and present depth and elevation of the impounded water and CCR; 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.
 - Structural/Operational Observations: Estimation of the approximate volume of the impounded water and CCR at the time of the inspection.
 - Other Changes: Inspection including change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

The East Ash Pond and West Ash Pond are both CCR surface impoundments with each pond approximately 10 acres in size. On October 11, 2021, CEC inspected both the East Ash Pond and West Ash Pond and our observations showed no signs of distress that would suggest the stability or operation of the impounding structure is compromised. At the time of the inspection, the West Ash Pond was drained and undergoing maintenance to remove bottom ash. The East Ash Pond was in operation and unchanged from the previous inspection.

1.0 CHANGES IN GEOMETRY

Both the East Ash Pond and West Ash Pond geometry was observed to be unchanged since the October 2020 inspection.

2.0 INSTRUMENTATION

Instrumentation associated with East Ash Pond and West Ash Pond includes a water level monitoring device in the outlet structure for both ponds. Our interview of station personnel and review of weekly inspection reports concluded that the water level monitors are operating properly. No other instrumentation was reported or observed that would be associated with the hydraulic structures, impoundment embankments, and/or slope performance.

3.0 CAPACITY AND IMPOUNDED VOLUME

Capacity and impounded volumes for the East Ash Pond and West Ash Pond and estimated depth of impounded water and CCR are represented in Table 1 and 2, attached. Volumes and depths for the West Ash Pond were determined by reviewing inspection reports, construction drawings, and from modeling using existing topographic data.

4.0 STRUCTURAL/OPERATIONAL OBSERVATIONS

Both the East Ash Pond and West Ash Pond were inspected for signs of distress that would have the potential to disrupt operation and safety of the ponds. None were observed. Prior to inspection, CEC reviewed the previous annual inspection reports, which did not identify conditions that indicate an actual or potential structural weakness. Weekly inspection reports were also reviewed and did not indicate an actual or potential structural weakness.

5.0 OTHER CHANGES

The East Ash Pond and West Ash Pond were inspected for other signs of other changes or distress that would have the potential to disrupt operation and safety of the ponds. Our inspection showed no distresses that would affect the operation and/or stability of either the East Ash Pond or West Ash Pond.

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: Dean Jones

Name: M. Dean Jones, P.E.

Date of Certification: October 13, 2021

Illinois Professional Engineer No.: 062-051317

Expiration Date: November 30, 2021

Table 1: Inspection Summary - East Ash Pond

Category	Regulation Reference	Evaluation	Recommended Action
Change in Geometry	§845.450(b)(2)(A) §257.83(b)(2)(i)	None	None
Instrumentation	§845.450(b)(2)(B) §257.83(b)(2)(ii)	Water level at outlet structure	None
Water Depth	§845.450(b)(2)(C) §257.83(b)(2)(iii)	1 to 2 Feet	None
CCR Depth	§845.450(b)(2)(C) §257.83(b)(2)(iii)	6.8 Feet	None
Estimated Storage Capacity	§845.450(b)(2)(D) §257.83(b)(2)(iv)	113.7 Acre Feet	None
Impounded Water Volume	§845.450(b)(2)(E) §257.83(b)(2)(v)	6 Acre Feet	None
Impounded CCR Volume	§845.450(b)(2)(E) §257.83(b)(2)(v)	44 Acre Feet	None
Structural/Operational Observations	§845.450(b)(2)(F) §257.83(b)(2)(vi)	None	None
Other Changes	§845.450(b)(2)(G) §257.83(b)(2)(vii)	None	None

Table 2: Inspection Summary - West Ash Pond

Category	Regulation Reference	Evaluation	Recommended Action
Change in Geometry	§845.450(b)(2)(A) §257.83(b)(2)(i)	None	None
Instrumentation	§845.450(b)(2)(B) §257.83(b)(2)(ii)	Water level at outlet structure	None
Water Depth	§845.450(b)(2)(C) §257.83(b)(2)(iii)	2 Feet	None
CCR Depth	§845.450(b)(2)(C) §257.83(b)(2)(iii)	2.9 to 12.2 Feet	None
Estimated Storage Capacity	§845.450(b)(2)(D) §257.83(b)(2)(iv)	138.5 Acre Feet	None
Impounded Water Volume	§845.450(b)(2)(E) §257.83(b)(2)(v)	12 Acre Feet	None
Impounded CCR Volume¹	§845.450(b)(2)(E) §257.83(b)(2)(v)	8 Acre Feet	None
Structural/Operational Observations	§845.450(b)(2)(F) §257.83(b)(2)(vi)	None	None
Other Changes	§845.450(b)(2)(G) §257.83(b)(2)(vii)	None	None