

**ANNUAL INSPECTION REPORT
FORMER ASH BASIN
POWERTON STATION
JULY 2017**

This annual inspection report has been prepared pursuant to Title 40 Code of Federal Regulations (CFR) 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. Civil & Environmental Consultants, Inc. (CEC) completed the following scope of services in preparing this annual inspection report.

- This is the initial annual inspection report. CEC reviewed weekly inspection reports provided by MWG.
- CEC performed the annual inspection in accordance with the requirements of 40 CFR 257.83(b). The annual inspection included observations pertaining to the following:
 - Changes in Geometry - §257.83(b)(2)(i); Observations of changes in the geometry of the FAB since the previous annual inspection were documented.
 - Instrumentation - §257.83(b)(2)(ii); The 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.
 - Capacity and Impounded Volume - §257.83(b)(2)(iii) through (v); Inspection observations for the approximate minimum, maximum, and present depth and elevation of the impounded water and coal combustion residuals (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 - §257.83(b)(2)(vi); Estimate the approximate volume of the impounded water and CCR at the time of the inspection.
 - Other Changes - §257.83(b)(2)(vii); The inspection will include change(s) which 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 has not received bottom ash or ash slag since the late 1980s. 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. A site plan of the FAB attached as Figure 1.

On June 23, 2017, CEC inspected both the North and South FAB Ponds. Our observations showed no signs of distress that that would suggest the stability or operation of the impounding structure would be compromised. Inspection of the interior basin slopes in North Pond was limited due to

the growth of vegetation, while the interior basin slopes of the South Pond allowed for easy inspection. In both cases, features such as erosion and sloughing were not observed.

1.0 CHANGES IN GEOMETRY - § 257.83(B)(2)(I)

The latest change in the geometry occurred in 2010 when the FAB, originally a single pond, was bisected by a new railroad embankment. The current geometry shows the FAB consists of a North Pond and South Pond and, reportedly, the geometry is unchanged since 2010.

2.0 INSTRUMENTATION - § 257.83(B)(2)(II)

Instrumentation associated with North and South FAB includes a series of monitoring wells as shown on Figure 1. Monitoring wells adjacent to North FAB included MW-02 through MW-05, and South FAB MW-01, MW-06 and MW-10. Instrumentation associated with the hydraulic structures, impoundment embankments, and/or slope performance do not exist and are not necessary. Maximum and minimum water levels recorded for each of the monitoring wells since February 2015 are provided below in Table 1.

Table 1: Maximum/Minimum Groundwater Elevations - Former Ash Basin

Monitoring Well ID.	Groundwater Elevation_{Max.}	Groundwater Elevation_{Min.}
North FAB		
MW-02	445.01 feet	433.15 feet
MW-03	445.31 feet	432.48 feet
MW-04	445.16 feet	431.20 feet
MW-05	445.57 feet	432.19 feet
South FAB		
MW-01	446.37 feet	439.02 feet
MW-06	450.73 feet	445.36 feet
MW-10	446.68 feet	439.17 feet

3.0 CAPACITY AND IMPOUNDED VOLUME - § 257.83(B)(2)(III) THROUGH (V)

Capacity and impounded volume of the FAB and estimated depth of impounded water and CCR are represented in Table 2. The volumes and depths were obtained by reviewing reports and from modeling using existing topographic data.

4.0 STRUCTURAL/OPERATIONAL OBSERVATIONS - § 257.83(B)(2)(VI)

CEC inspected the basin for signs of distress that would have the potential to disrupt operation and safety of the FAB. Both the North and South Ponds are partially incised minimizing the potential of a release of CCR from the FAB. CCR is primarily located within the incised area of both ponds. CEC did not identify conditions that had potential to disrupt the operation and safety of the North and South Ponds.

5.0 OTHER CHANGES - § 257.83(B)(2)(VII)

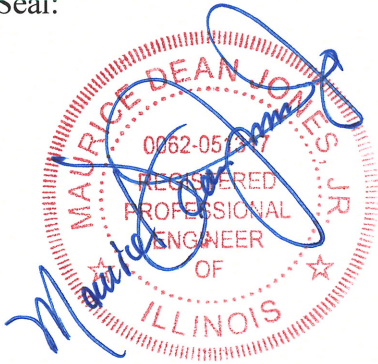
CEC inspected the basin for signs of other changes or distress that would have the potential to disrupt operation and safety of the basin. Our inspection showed no distresses that would affect the operation and/or stability of the FAB.

6.0 LIMITATIONS AND CERTIFICATION

This initial annual inspection report was prepared to meet the requirements of §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:



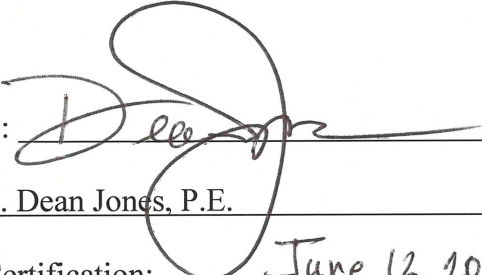
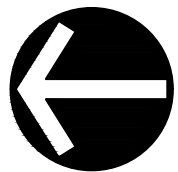
Signature: 
Name: M. Dean Jones, P.E.
Date of Certification: June 12, 2017
Illinois Professional Engineer No.: 062-051317
Expiration Date: November 30, 2017

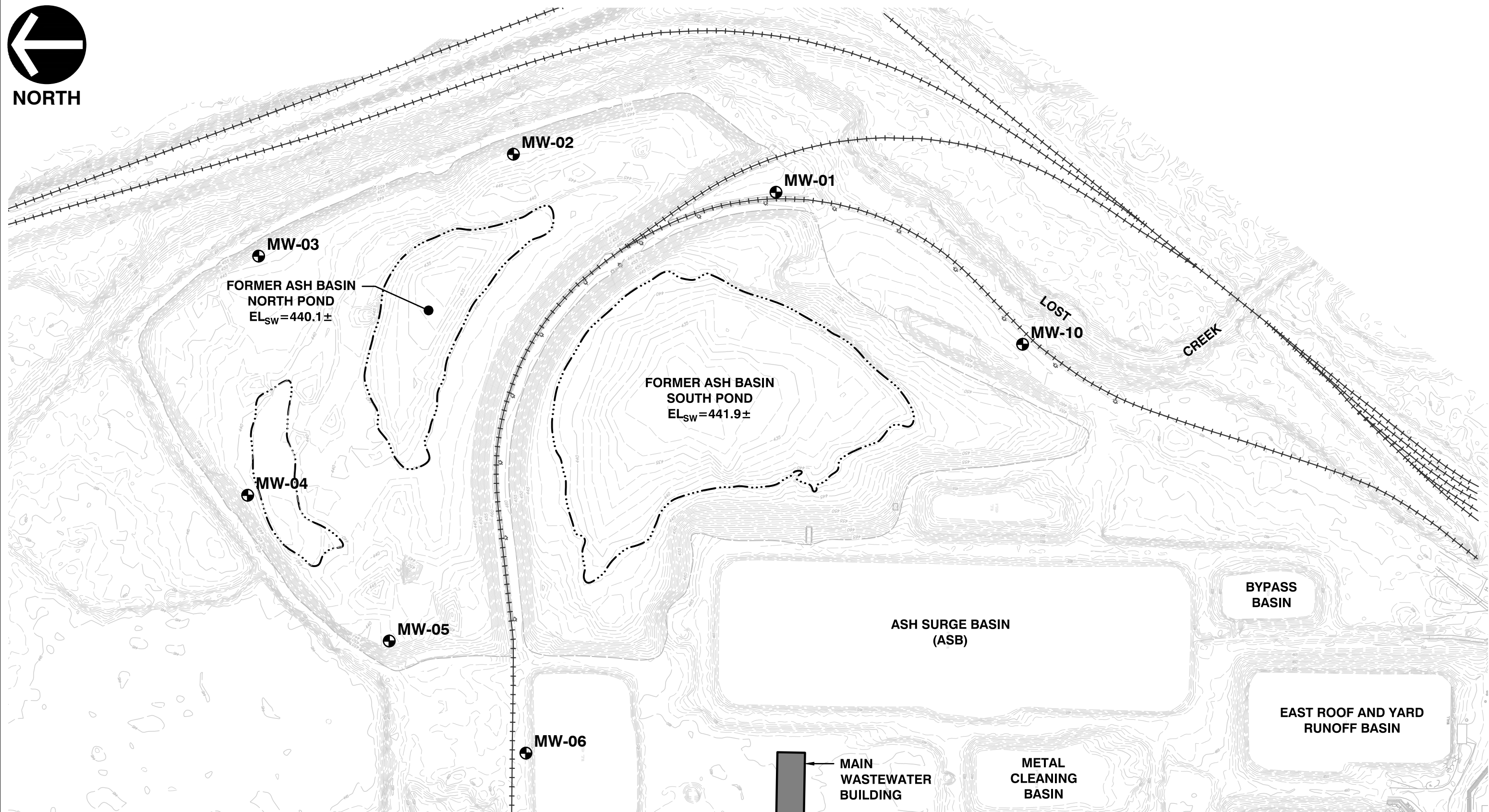
Table 2: Inspection Summary - Former Ash Basin

Category	Regulation Reference	Evaluation	Recommended Action
Change in Geometry	§257.83(b)(2)(i)	None	None
Instrumentation	§257.83(b)(2)(ii)	None	None
Water Depth	§257.83(b)(2)(iii)	North Pond - 12.4 feet South Pond - 14.5 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 - 7.3 Acre Feet South Pond - 34.7 Acre Feet	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)	None	None
Other Changes	§257.83(b)(2)(vii)	None	None



NORTH

P:\2017\170-125\CAAD\DWG\Former Ash Basin Inspection\170125-CV02-C102-Site Plan.dwg[LAYOUT] LS:(7/12/2017 - ccase) - LP: 7/12/2017 12:45 PM



REFERENCE

1. TOPOGRAPHIC INFORMATION BASED ON SURVEY BY RIDGELINE CONSULTANTS PERFORMED IN FEBRUARY AND MARCH 2016 AND APPENDED TO AERIAL SURVEY PERFORMED BR AEROMETRIC, INC. DATED JUNE 19, 2008.
2. SURFACE WATER ELEVATION, EL_{SW} , DATED JUNE 23, 2017.

LEGEND

- TOPOGRAPHY (1-FOOT INTERVAL)
- WATER LINE
- MW-01 MONITORING WELL (LOCATION APPROXIMATE)

*HAND SIGNATURE ON FILE
SCALE IN FEET



MAIN WASTEWATER BUILDING



METAL CLEANING BASIN

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**POWERTON STATION
 FORMER ASH BASIN
 PEKIN, ILLINOIS**

SITE PLAN

DRAWN BY: MSK	CHECKED BY: MDJ	APPROVED BY: MDJ*	FIGURE NO.:
DATE: 06/27/2017	DWG SCALE: 1"=200'	PROJECT NO: 170-125.0200	1