

MWVG

Midwest Generation, LLC
Waukegan Generating Station

Post-Closure Care Plan for East Ash Pond



Revision 1

October 29, 2021

Issue Purpose: Use

Project No.: 12661-123

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1.0 PURPOSE & SCOPE

Illinois CCR Rule Reference: 35 Ill. Adm. Code 845.780(d)

Federal CCR Rule Reference: 40 CFR 257.104(d)

1.1 PURPOSE

The East Ash Pond at Midwest Generation, LLC's (MWG) Waukegan Generating Station ("Waukegan" or the "Station") is an existing coal combustion residual (CCR) surface impoundment that is regulated by the Illinois Pollution Control Board's "Standards for the Disposal of Coal Combustion Residuals in CCR Surface Impoundments." These regulations are codified in Part 845 to Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code 845, Ref. 1) and are also referred to herein as the "Illinois CCR Rule." The East Ash Pond is also regulated by the U.S. Environmental Protection Agency's (EPA) "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments," 40 CFR Part 257 Subpart D (Ref. 2), also referred to herein as the "Federal CCR Rule."

Pursuant to 35 Ill. Adm. Code 845.780(d) and 40 CFR 257.104(d), this document provides the written post-closure care plan for the East Ash Pond at Waukegan. MWG intends to close this CCR surface impoundment by leaving the impounded CCR in place and installing a final cover system over the impoundment in accordance with 35 Ill. Adm. Code 845.750 and 40 CFR 257.102(d). Following completion of all closure activities, MWG will conduct post-closure care for the East Ash Pond in accordance with the requirements of 35 Ill. Adm. Code 845.780 and 40 CFR 257.104(b). This plan describes the post-closure care activities MWG anticipates performing throughout the post-closure care period for the East Ash Pond.

1.2 SCOPE

Per the 2016 Water Infrastructure Improvements for the Nation (WIIN) Act, the East Ash Pond will continue to be subject to both the Illinois and Federal CCR Rules until the U.S. EPA approves the Illinois EPA's CCR permit program. The Illinois EPA has yet to publish a timeline for submitting its proposed CCR permit program to the U.S. EPA for approval, and so this preliminary written closure plan has been prepared pursuant to both sets of regulations.

2.0 POST-CLOSURE MONITORING & MAINTENANCE ACTIVITIES

Illinois CCR Rule Reference: 35 Ill. Adm. Code 845.780(d)(1)(A)

Federal CCR Rule Reference: 40 CFR 257.104(d)(1)(i)

Post-closure monitoring for the East Ash Pond will include (1) maintaining the integrity and effectiveness of the final cover system, (2) maintaining the groundwater monitoring system, and (3) monitoring the

groundwater at the site. Table 1 summarizes the post-closure monitoring activities planned to meet these objectives and the corresponding frequencies at which these activities will be performed (at a minimum).

Table 1 – Post-Closure Monitoring Frequency

Monitoring Activity	Description	Monitoring Frequency	Action Items
Final Cover Monitoring	Visually inspect final cover for surface erosion.	Weekly, and following each 25-year, 24-hour storm event if the storm event occurs more than 48 hours before the next scheduled weekly inspection.	Replace synthetic turf infill as needed.
	Visually inspect final cover for settlement, subsidence, and vertical cracking.		Repair holes, depressions, etc. as needed to prevent standing water and infiltration into covered ash.
Groundwater Monitoring	Monitor groundwater quality at the East Ash Pond.	Quarterly for constituents and monthly for groundwater elevations, switching to semi-annually after five years of post-closure monitoring if approved by the Illinois EPA.	If necessary, implement corrective action remedies to achieve compliance with groundwater protection standards.

2.1 FINAL COVER SYSTEM MONITORING & MAINTENANCE

Illinois CCR Rule Reference: 35 Ill. Adm. Code 845.780(b)(1)

Federal CCR Rule Reference: 40 CFR 257.104(b)(1)

Throughout the post-closure care period, MWG will maintain the integrity and effectiveness of the East Ash Pond’s final cover system by regularly inspecting the cap for evidence of surface erosion, settlement, subsidence, or other events. If inspections reveal problems, appropriate corrective measures will be taken to remedy effects of surface erosion, settlement, subsidence, or other events.

2.2 GROUNDWATER MONITORING

Illinois CCR Rule Reference: 35 Ill. Adm. Code 845.780(b)(3)

Federal CCR Rule Reference: 40 CFR 257.104(b)(3)

MWG will maintain the East Ash Pond’s groundwater monitoring system and will continue to monitor groundwater at the site throughout the post-closure care period in accordance with the requirements of 35 Ill. Adm. Code Part 845 Subpart F (“Groundwater Monitoring and Corrective Action”) and 40 CFR 257.90 through 40 CFR 257.98. During the first five years of the pond’s post-closure care period, groundwater monitoring will be performed quarterly for constituents and monthly for groundwater elevations. After five years of post-closure care, groundwater monitoring may be switched to a semi-annual basis if approved by the Illinois EPA.

3.0 FACILITY CONTACT DURING POST-CLOSURE CARE PERIOD

Illinois CCR Rule Reference: 35 Ill. Adm. 845.780(d)(1)(B)

Federal CCR Rule Reference: 40 CFR 257.104(d)(1)(ii)

The name, address, telephone number, and e-mail address of the person to contact about the East Ash Pond during the post-closure care period are presented below:

Name: Paulo Rocha, Plant Manager
Address: Waukegan Generating Station
401 E. Greenwood Ave.
Waukegan, IL 60087
Telephone Number: (847) 599-2212
E-mail Address: paulo.rocha@nrg.com

4.0 PROPERTY USE DURING POST-CLOSURE CARE PERIOD

Illinois CCR Rule Reference: 35 Ill. Adm. Code 845.780(d)(1)(C)

Federal CCR Rule Reference: 40 CFR 257.104(d)(1)(iii)

MWG intends for the East Ash Pond site to remain undisturbed during the post-closure care period. MWG plans to limit access to the site only for inspecting the condition of the final cover system, making repairs to the final cover system (as needed), and for accessing the groundwater monitoring wells (if necessary).

5.0 AMENDMENTS TO POST-CLOSURE CARE PLAN

Illinois CCR Rule Reference: 35 Ill. Adm. Code 845.780(d)(3)

Federal CCR Rule Reference: 40 CFR 257.104(d)(3)

This post-closure care plan will be amended in accordance with 35 Ill. Adm. Code 845.780(d)(3) and 40 CFR 257.104(d)(3) if a change in the operation of the East Ash Pond would substantially affect this plan or if an unanticipated event necessitates a revision to this plan.

6.0 CERTIFICATION

Illinois CCR Rule Reference: 35 Ill. Adm. Code 845.780(d)(4)

Federal CCR Rule Reference: 40 CFR 257.102(d)(4)

I certify that:

- This written post-closure care plan for the East Ash Pond was prepared by me or under my direct supervision.
- The work was conducted in accordance with the requirements of 35 Ill. Adm. Code 845.780 and with the requirements of 40 CFR 257.104.
- I am a registered professional engineer under the laws of the State of Illinois.

Certified By: Thomas J. Dehlin

Date: October 29, 2021

Seal:



Th. Dehlin
10/29/2021
Exp. 11/30/2021

7.0 REFERENCES

1. Illinois Pollution Control Board. "Standards for Disposal of Coal Combustion Residuals in CCR Surface Impoundments." 35 Ill. Adm. Code 845. Accessed October 19, 2021.
2. U.S. Environmental Protection Agency. "Standards for Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments." 40 CFR Part 257 Subpart D. <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-I/part-257/subpart-D>. Accessed October 19, 2021.