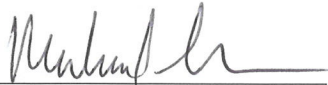
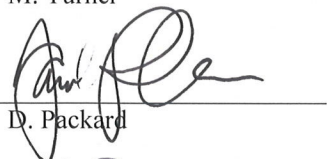





Post-Closure Plan for CCR Surface Impoundment

Prepared for Wisconsin Power and Light Company
Columbia Energy Center

Issue Date: September 14, 2016
Issue Purpose: For Use

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Certification and Seal:

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Wisconsin:

James H. Staehlin

My license renewal date is July 31, 2018

Pages covered by this seal: All

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Project Number: 13391-027

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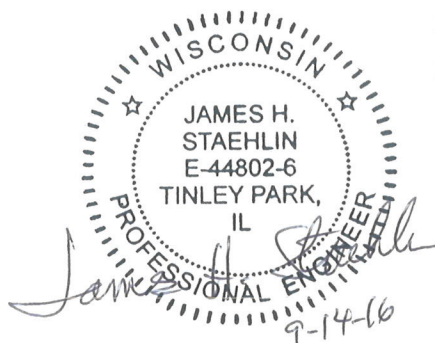




TABLE OF CONTENTS

1. INTRODUCTION AND PURPOSE	1
1.1 Applicability	1
2. MONITORING AND MAINTENANCE ACTIVITIES	3
2.1 Mowing	3
2.2 Visual inspection by Owner/Operator.....	3
2.3 Visual Inspection and Report by Licensed Professional Engineer	3
2.4 Maintain the Groundwater Monitoring System and Monitor the Groundwater.....	4
3. STATION CONTACT FOR POST-CLOSURE CARE	4
4. PROPERTY USE DURING POST-CLOSURE CARE PERIOD	4
5. CERTIFICATIONS	4
6. REFERENCES.....	5

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1. INTRODUCTION AND PURPOSE

40 CFR 257.104(d) – *“Written post-closure plan – (1) Content of the plan. The owner or operator of a CCR unit must prepare a written post-closure plan that includes, as a minimum, the information specified in paragraphs (d)(1)(i) through (iii) of [section 257.104].”*

Pursuant to 40 CFR 257.104(d), Sargent & Lundy (S&L), on behalf of Wisconsin Power and Light Company (WPL), has prepared the following Post-Closure Plan for the Primary Pond, an existing CCR surface impoundment at the Columbia Energy Center located near Pardeeville, WI. WPL intends to close the Primary Pond by leaving the CCR in place and providing a final cover system in compliance with the requirements of 40 CFR 257.102(d). Following the closure of the CCR surface impoundment, WPL must conduct post-closure care for the CCR unit that is closed in place in accordance with 40 CFR 257.104(b). Note that the Secondary Pond, an inactive CCR surface impoundment at this facility, will be closed through removal of CCR and is not subject to the post-closure care requirements identified in 40 CFR 257.104. An annotated aerial photograph of the Station’s surface impoundments and CCR storage locations is included in Figure 1 for reference.

1.1 Applicability

40 CFR 257.104(a)(2) – *“An owner or operator of a CCR unit that elects to close a CCR unit by removing CCR as provided by [section 257.102(c)] is not subjected to the post-closure care criteria under this section.”*

All CCR material will be removed from the Secondary Pond meaning it is exempt from post-closure monitoring and maintenance activities. The remainder of this plan applies only to the Primary Pond which will be closed with CCR in place.



Figure 1: Columbia Energy Center Surface Impoundments and CCR Storage Locations

2. MONITORING AND MAINTENANCE ACTIVITIES

40 CFR 257.104(d)(1)(i) – “A description of the monitoring and maintenance activities required in paragraph (b) of [section 257.104] for the CCR unit, and the frequency at which these activities will be performed.”

Monitoring and Maintenance Activities	Frequency
Mow Vegetation	Semi-Annually (as a minimum)
Visual Inspection by Owner/Operator	Monthly (as a minimum)
Visual Inspection and Report by Licensed Professional Engineer	As necessary
Repair of Vegetative Cover	As necessary
Repair of Final Cover System	Following observance of settlement, subsidence, erosion, or other events
Inspect Groundwater Monitoring System	Monthly
Repair of Groundwater Monitoring System	Following observance of an issue
Monitor the Groundwater	Semi-Annually

2.1 Mowing

The Station will perform regular mowing of the final cover system vegetation during the growing season. Mowing will be performed on a semi-annual basis unless additional mowing is required to accommodate vegetation growth rate.

2.2 Visual inspection by Owner/Operator

At a minimum, the Owner / Operator will visually inspect the closed impoundment on a monthly basis to identify any problem areas such as erosion, subsidence, settlement or other events. The monthly visual inspection will also include an inspection of the groundwater monitoring system wells to visually assess the condition of the protective casing and cover system. If problems are observed with the vegetative cover, actions will be taken to reseed the area and maintain the erosion protection provided by the vegetation. Furthermore, should the monthly inspection identify issues concerning the final cover system or the groundwater monitoring system, actions will be taken to make repairs in accordance with the original design.

2.3 Visual Inspection and Report by Licensed Professional Engineer

Should the visual inspections by Owner / Operator indicate potential concerns regarding the integrity of the final cover system, a detailed inspection of the closed CCR surface impoundment may be performed by a licensed professional engineer. The professional engineer would visually inspect the surface and side slopes of the closed impoundment to identify any problem areas such as erosion, subsidence, settlement or other events.

2.4 Maintain the Groundwater Monitoring System and Monitor the Groundwater

The Station will maintain the groundwater monitoring system and monitor groundwater quality in accordance with the requirements of 40 CFR 257.90 through 257.98. Groundwater monitoring will be performed on a semi-annual basis in accordance with 40 CFR 257.94(b).

3. STATION CONTACT FOR POST-CLOSURE CARE

40 CFR 257.104(d)(1)(ii) – *“The name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure care period.”*

The following contact information is provided if ever a need should arise to discuss the contents or adequacy of this Post-Closure Plan with Station personnel:

Columbia Energy Center
Attn: Plant Manager
8385 Murray Road
Pardeeville, WI 53954
(608) 742-0711
CCRProgram@alliantenergy.com

4. PROPERTY USE DURING POST-CLOSURE CARE PERIOD

40 CFR 257.104(d)(1)(iii) – *“A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other component of the containment system or the function of the monitoring systems unless necessary to comply with the requirements of this subpart...”*

The surface impoundment area is intended to remain a vegetated and undisturbed area for the duration of the post-closure care period.

5. CERTIFICATIONS

40 CFR 257.104(d)(4) – *“The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written post-closure plan meets the requirements of [section 257.104].”*

It is S&L’s opinion that this written closure plan meets the requirements of 40 CFR 257.104(d).

6. REFERENCES

1. 40 CFR Part 257; Environmental Protection Agency Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule, Federal Register, Vol. 80, No. 74, Friday, April 17, 2015, as amended by the Technical Amendments published in the Federal Register on July 2, 2015 Page 37988.