



Consulting
Engineers and
Scientists

Regulation Compliance Report Post-Closure Plan

Caledonia Ash Landfill,
Caledonia, Wisconsin

Submitted to:

We Energies
333 West Everett Street, A231
Milwaukee, Wisconsin 53203

Submitted by:

GEI Consultants, Inc.
3159 Voyager Drive
Green Bay, Wisconsin 54313
920-455-8200

October 2016, Revision 0

Project 1610530

John M. Trast, P.E.
Senior Consultant

Casey Fritsch, P.E.
Project Professional

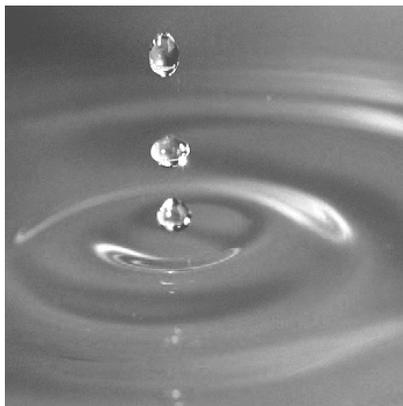


Table of Contents

1.	Introduction	1
2.	Post-Closure Narrative	2
2.1	Final Cover System Maintenance	2
2.2	Ground Water Monitoring Network	3
3.	Conclusion and Certification	4

JXT:cah

K:\WEC Energy Group\1610530_We Energies Caledonia LF Engineering Assistance\In_Progress\CCR Post Closure\1610530 Caledonia LF CCR Post Closure Plan_October 2016.docx

1. Introduction

We Energies owns and operates a solid waste disposal facility on the Oak Creek Site in the NE 1/4 of Section 1, Township 4 North, Range 22 East, in the Village of Caledonia, Racine County, Wisconsin. The We Energies Caledonia Ash Landfill is regulated as an industrial waste landfill by the Wisconsin Department of Natural Resources (WDNR) under the provisions of Chapter 289 Wisconsin State Statutes, and all applicable requirements of Chapters NR 500 of the Wisconsin Administrative Code. The design, construction, operation, closure, and post-closure care requirements are specified in the WDNR conditionally approved Plan of Operations, License No. 03232, FID No. 252108450.

In addition to the state regulations, the landfill is also required to comply with 40 CFR Part 257 Subpart D – *Standards for Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments* and is defined as a CCR unit and existing CCR landfill in accordance with § 257.53. Future landfill cells are permitted by the WDNR in the conditionally approved Plan of Operation and defined as lateral expansions under § 257.53 when constructed.

This report fulfills the requirements for a written Post-Closure Plan for the Caledonia Ash Landfill in accordance with § 257.104 – *Post Closure Care Requirements*. In accordance with § 257.104(d)(1) this report describes the monitoring and maintenance activities for the CCR unit, and the frequency at which these activities will be performed; provides the name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure care period; and provides a description of the planned uses of the property during the post-closure period.

This post-closure plan includes the following sections:

- Section 1 Introduction
- Section 2 Post-Closure Narrative
- Section 3 Conclusion and Certification

2. Post-Closure Narrative

This plan fulfills the requirements for a written Post-Closure Plan for the Caledonia Ash Landfill in accordance with § 257.104 – *Post Closure Care Requirements*.

Following the final closure of Caledonia Ash Landfill, We Energies will be responsible for the post-closure care of the facility. In accordance with § 257.104(b), We Energies is responsible for providing post-closure care and maintenance including maintaining the integrity and effectiveness of the final cover system, including making repairs to the final cover as necessary correct the effects of settlement, subsidence, erosion, or other events; maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of §§ 257.90 through 257.98, and complying with the recordkeeping requirements specified in § 257.105(i), the notification requirements specified in § 257.106(i), and the Internet requirements specified in § 257.107(i) during the post-closure period. The post-closure care period is for a minimum of 30 years if the owner or operator is under detection monitoring. If the facility is in assessment monitoring, the post-closure care period is extended until the facility returns to detection monitoring.

§ 257.104(d)(ii). Post-closure period facility contact:

Mr. Timothy C. Muehlfeld, P.E.
WEC Energy Group
333 West Everett Street
Milwaukee, WI 53203
(414) 221-2206
tim.muehlfeld@we-energies.com

§ 257.104(d)(iii). During the post-closure care period, use of the landfill final cover area will be limited to green space or other activities that do not disturb the integrity of the final cover, base liner, or any other component of the containment, leachate collection, or groundwater monitoring systems.

2.1 Final Cover System Maintenance

Inspection of the final cover system is included in the annual inspection required under § 257.84(b). The annual inspection will note any final cover defects requiring repair.

Maintenance of the final cover will include repairs due to settlement, subsidence, erosion, or other events and regular mowing of the cover vegetation. Final cover system repairs necessitated due to settlement, subsidence, erosion, or other events will be completed as soon as practical. Actions should be taken as soon as practical to restore and protect areas that require maintenance and reestablish vegetation for erosion protection. Final cover repair and maintenance activities will be noted in the annual inspection report required under § 257.84(b)(2).

The final cover will be mowed at a minimum on an annual basis for the first five years to help establish a well-vegetated final cover and at a minimum once every five years thereafter, to inhibit the growth and presence of woody vegetation. Mowing on a more frequent basis may be required to accommodate more vigorous growth rate or to prevent the establishment of woody vegetation. Other techniques may also be employed to aid in the establishment of the desired vegetation and control of invasive grasses and woody vegetation, including but not limited to prescribe burning and selective herbicide applications.

2.2 Ground Water Monitoring Network

We Energies will be responsible for maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of §§ 257.90 through 257.98. The groundwater monitoring network will be inspected on a semi-annual basis, in conjunction with the groundwater sampling. Any noted deficiencies, damage or required repairs will be completed as soon as practical but prior to the next sampling event. All groundwater monitoring will be completed in accordance with the facility's Groundwater Monitoring Plan for a minimum of 30-years post-closure care period. Provided the site is at detection monitoring at the conclusion of the 30-year post-closure care period, monitoring will cease. However, if groundwater monitoring is at assessment monitoring, groundwater monitoring will continue until monitoring returns to detection monitoring. All sampling and analysis will be completed in accordance with the facility's sampling and analysis plan.

3. Conclusion and Certification

We Energies owns and operates a solid waste disposal facility on the Oak Creek Site in the NE 1/4 of Section 1, Township 4 North, Range 22 East, in the Village of Caledonia, Racine County, Wisconsin. Caledonia Ash Landfill is required to comply with 40 CFR Part 257 Subpart D – *Standards for Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments*. This plan fulfills the requirements for a written Post-Closure Plan for the Caledonia Ash Landfill in accordance with § 257.104 - *Criteria for Conducting the Closure or Retrofit of CCR Units*, describing the monitoring and maintenance activities for the CCR unit, and the frequency at which these activities will be performed; provides the name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure care period; and provides a description of the planned uses of the property during the post-closure period.

The Post-Closure Plan was completed under the direction of John M. Trast, P.E. I am a licensed professional engineer in the State of Wisconsin in accordance with the requirements of ch. A-E 4, Wisconsin Administrative Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wisconsin Administrative Code; and that, to the best of my knowledge, all information contained in this document is correct and the document was prepared in compliance with all applicable requirements in 40 CFR Part 257 Subpart D.



10/12/2016