

LOCATION RESTRICTIONS DEMONSTRATION
UNSTABLE AREAS
40 CFR PART 257.64
CALEDONIA ASH LANDFILL
WE ENERGIES

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. As currently constructed, the landfill has 27.2 acres open, 34.9 acres of base liner system (Cells 1, 2, 3, 4, 6, 8, and 10) is constructed, and 7.7 acres of perimeter slopes (Cells 1, 2, 3, 4, and 6) have received final cover.

In addition to the state regulations, the Caledonia Ash 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*. Cells 1, 2, 3, 4, 6, 8 and 10 is defined as a CCR unit and existing CCR Landfill in accordance with 40 CFR 257.53 since construction commenced prior to October 19, 2015. Future landfill cells are permitted by the WDNR in the conditionally approved Plan of Operation and defined as lateral expansions under 40 CFR 257.53 when constructed. This document fulfills the requirements for the Location Restrictions Demonstration for the Caledonia Ash Landfill as an existing CCR landfill in accordance with 40 CFR 257 Subpart D.

Location restrictions related to unstable areas are outlined in 40 CFR 257.64 – Unstable Areas:

§ 257.64 Unstable areas.

(a) An existing or new CCR landfill, existing or new CCR surface impoundment, or any lateral expansion of a CCR unit must not be located in an unstable area unless the owner or operator demonstrates by the dates specified in paragraph (d) of this section that recognized and generally accepted good engineering practices have been incorporated into the design of the CCR unit to ensure that the integrity of the structural components of the CCR unit will not be disrupted. (b) The owner or operator must consider all of the following factors, at a minimum, when determining whether an area is unstable: (1) On-site or local soil conditions that may result in significant differential settling; (2) On-site or local geologic or geomorphologic features; and (3) On-site or local human-made features or events (both surface and subsurface).

The rule defines an “Unstable Area” as “a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity, including structural components of some or all of the CCR unit that are responsible for preventing releases from such unit.

Based on review of the site’s location, soil conditions, human-made features or events (both surface and subsurface), geology, and hydrogeology the existing Caledonia Ash Landfill is not located in an unstable area that could result in significant differential settlement or mass movement damaging the facility.

This report 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.



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