

1.0 INTRODUCTION

This fugitive dust control plan has been prepared to meet the requirements of 40 CFR 257.80(b).

The active area of the Caledonia Ash Landfill is divided into a disposal area and various segregated coal combustion residuals (CCR) stockpiles, which are staged for eventual beneficial utilization. The Caledonia Ash Landfill also includes areas that have been filled and have a final cover in place.

2.0 FUGITIVE DUST CONTROL MEASURES

Conditioning and Delivery of CCR: All CCR delivered to the Caledonia Ash Landfill are conditioned with water at the source prior to transporting the materials to the landfill. Water is added to the CCR at the source in sufficient quantities such that the CCR is not dusty during transport or delivery. CCR will also be conditioned at the source as necessary to the extent that the delivered CCR does not contain free water.

All CCR, except flue gas desulfurization (FGD) filter cake from Elm Road Generating Station (ERGS), is delivered to the Caledonia Ash Landfill in dump trucks equipped with deployed tarpaulins to minimize generation of dust during transport. FGD filter cake from ERGS is dropped into special luggers in the wastewater treatment plant. These luggers are not equipped with covers. The FGD filter cake is thoroughly and evenly conditioned during the filter press process and there is no likelihood of this material becoming airborne during the short drive (less than 1-1/2 miles) to the Caledonia Ash Landfill over private roads.

Access Road: The Caledonia Ash Landfill access road is paved to minimize the generation of dust due to truck traffic. The paved surface also facilitates sweeping and watering as described below.

The access road is swept and watered regularly to minimize the accumulation of dust and dirt on the road surface that might become airborne due to truck traffic.

The access road has a posted speed limit of 25 MPH to help minimize the generation of airborne dust due to traffic.

Compaction and Grooming: CCR is unloaded from transport vehicles at the designated stockpile or disposal area in the active landfill area as appropriate. Although CCR are conditioned for transport, they may not be delivered at a moisture level necessary to achieve adequate compaction. If materials are delivered dry of the optimum compaction range, water is applied to the material by a water truck. If materials are delivered wet of the optimum compaction range, they are allowed to dry. CCR delivered to the Caledonia Ash Landfill are graded and compacted into the designated stockpile or disposal area as soon as the materials are within the optimum compaction moisture range.

The entire surface of the active landfill, including stockpiles, is kept groomed to minimize the amount of loose material that could become airborne under windy conditions. The landfill is groomed under moist conditions to facilitate compaction of the surface and to minimize dust generation during the grooming process. Back-dragging the surface with a bulldozer or front end loader is the normal effective method of grooming the landfill surface.

Active Area Traffic Control: Networks of roads within the active area of the landfill provide access to the disposal area and to the segregated stockpiles. These roads are constructed of bottom ash and minimize the need to have traffic routed over areas with fine grained surfaces, such as fly ash. Bottom ash provides structurally sound all-season roads, containing low fines content. These bottom ash roads are watered regularly to minimize dust generation due to wind or traffic.

Active Area Exit: To minimize track-out onto the access road, all trucks and equipment are routed over a stone tracking pad, through a wheel wash station and over a cattle guard prior to leaving the active landfill area. The wheel wash station is a shallow concrete basin filled with water. The bottom of the wheel wash basin is ridged concrete that vibrates the tires while driving through the station to loosen and remove material stuck to tire treads. The wheel wash station is operated outside of freezing conditions. The wheel wash station is maintained regularly by removing solids and by changing the water in the basin. A stone tracking pad provides the approach to the wheel wash station. The wheel wash exit is also a stone tracking pad that extends to the cattle guard. The cattle guard also vibrates the tires to help remove material that may still be adhering to the treads and also provides a hydraulic break between the active landfill and the access road beyond the waste limit. Stone tracking pads are groomed as they become clogged with fines and are replaced as necessary.

Control of Wind Generated Dust in Active Area: In addition to traffic control and surface compaction and grooming efforts discussed above, the generation of windborne fugitive dust is effectively minimized by regularly wetting exposed CCR surfaces with a water truck equipped with spray bars and water jets. Leachate generated at the landfill is used and is supplemented as necessary with clean water. Only clean water is applied to the access road.

In the winter, snow fencing is erected along long slopes and slope breaks as necessary to help minimize the generation of windborne dust due to wind scouring.

Final Cover: Due to the success of our beneficial use program, CCR disposal activities at the Caledonia Ash Landfill are fairly minimal and the majority of the active area of the landfill is devoted to beneficial reuse stockpile management. CCR that is delivered to the landfill for disposal are placed in the designated disposal area and sections of final cover are installed as soon as final waste grades are achieved over a sufficient area to support a practical final cover installation work scope.

3.0 CITIZEN COMPLAINTS

Citizen complaints will be routed to the Facility Manager for the Caledonia Ash Landfill. Citizen complaints are generally received by the We Energies Call Center at (800) 242-9137, but may also be received by the Control Room, Media Relations, etc. The Facility Manager will prepare a complaint summary including information provided by the citizen (such as name, date, time, nature of complaint), a summary of conversations with the citizen and a summary of any actions taken to address the citizen complaint. Complaint summaries will be included in the annual fugitive dust control report as required by 40 CFR 257.80(c).

4.0 ASSESSMENT OF FUGITIVE DUST CONTROL PLAN

The fugitive dust control measures outlined in this plan were developed as part of the plan of operations for the Caledonia Ash Landfill in accordance with Chapter NR506 of the Wisconsin Administrative Code. These fugitive dust control measures have been in effect for years and have been effective in minimizing the generation of airborne dust at the facility. The continuing effectiveness this fugitive dust control plan will be evaluated during the weekly and annual inspections required by 40 CFR 257.84.

5.0 CERTIFICATION

To meet the requirements of 40 CFR 257.80(b)(7), I Timothy C. Muehlfeld, hereby certify that I am a licensed professional engineer in the State of Wisconsin in accordance with the requirements of ch. A-E 4, Wis. Adm. Code; that this document has been prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. Adm. 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 257.80.

