CCR Fugitive Dust Control Plan

Walter Scott, Jr. Energy Center

MidAmerican Energy Company

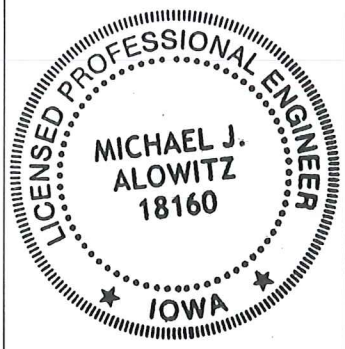
April 01, 2025

→ The Power of Commitment

Certification

CCR Fugitive Dust Control Plan
Walter Scott, Jr. Energy Center
MidAmerican Energy Company
Permit No. #70-SDP-06-82P

I certify this Annual Groundwater Monitoring and Corrective Action Report meets the requirements of 40 CFR §257.90(e).



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 Iowa.

Michael J. Alowitz, P.E. — Date: 4/1/2025

License Number: 18160

My license renewal date is: December 31, 2026

Pages or sheets covered by this seal: Entire Document

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1. Introduction

This Fugitive Dust Control Plan was developed for MidAmerican Energy Company (MidAmerican) Walter Scott, Jr. Energy Center (WSEC) Coal Combustion Residuals (CCR) Monofill and North and South Impoundments. On April 17, 2015, the Environmental Protection Agency (EPA) issued the final version of the federal coal combustion residuals rule (CCR Rule) to regulate the disposal of CCR materials generated at coal- fired units. The rule is being administered as part of the Resource Conservation and Recovery Act (RCRA, 42 U.S.C. §6901 et seq.), using the Subtitle D approach. On August 5, 2016, an extension of compliance deadlines for certain inactive surface impoundments, and a response to partial vacatur, was published in the Federal Register.

MidAmerican is subject to the CCR Rule and CCR Rule Extension, and as such has revised their original Fugitive Dust Control Plan for sites handling and disposing of CCR per 40 CFR 257.80. This report provides the revised Fugitive Dust Control Plan for WSEC located in Council Bluffs, Iowa.

This Fugitive Dust Control Plan is in addition to, not in place of, any other applicable site permits, environmental standards, or work safety practices.

2. Plan Objectives

The Fugitive Dust Control Plan identifies MidAmerican's control measures and practices to minimize and control fugitive dust as required by the CCR Rule. The plan defines the ways in which MidAmerican personnel and subcontractors will mitigate CCR dust emissions at the plant.

To meet these objectives, the Fugitive Dust Control Plan:

– Identifies potential CCR fugitive dust sources at the facility.
– Identifies control measures and practices to control and minimize fugitive dust.
– Identifies fugitive dust control recordkeeping requirements.
– Identifies fugitive dust control notification requirements.

3. Fugitive Dust Sources and Controls

MidAmerican owns and operates WSEC, located in Council Bluffs, Iowa. The plant operates a 690-Megawatt (MW) generating unit (Unit 3) and a 790-MW generating unit (Unit 4). Former Unit 1 and Unit 2 were demolished. Coal combustion residuals produced at WSEC include fly ash, bottom ash/economizer ash, and waste ash, which are currently either utilized for beneficial reuse or disposed of in an onsite monofill. In the past, CCR materials were disposed in the North and South Impoundments. These impoundments were closed in 2023 and are not an anticipated source of fugitive dust.

In addition to the controls outlined in this plan, MidAmerican adheres to controls and best management practices that are required and outlined in site permits and plans. MidAmerican also holds subcontractors responsible for controlling fugitive dust. Boral Limited conducts CCR disposal operations and maintenance activities within the site monofill.

Table 3.1 lists the CCR related fugitive dust sources identified at the facility, briefly describing operations at each potential source of fugitive dust.

Table 3.1 CCR Fugitive Dust Sources

Source Name	Description
Bottom Ash/Economizer Ash Handling	Transported via truck and disposed at the monofill
Fly Ash Handling	Pneumatic transport to silo
Waste Ash Handling	Pneumatic transport to silo or mix with bottom ash for disposal at the monofill
Haul Roads	Transport road within the plant site and to the monofill
Monofill	Truck unloading/material placement/grading

3.1 Bottom Ash/Economizer Ash Handling

Unit 3 and Unit 4 bottom ash and economizer ash are handled dry and discharged into separate concrete bunkers. The Unit 3 bottom ash and economizer ash bunker has a roof, concrete walls on three sides, an overhead door, and a concrete floor to minimize potential fugitive dust emissions. The Unit 4 economizer bunker is similar to the Unit 3 bunker but does not have an overhead door or roof.

Within the bunkers, bottom ash is mixed with economizer ash or waste ash (or both) and hauled to the monofill for disposal. Dust control measures for loading, transport, and disposal of bottom ash and economizer ash are described in Table 3.2.

Table 3.2 Bottom Ash/Economizer Ash Handling Control Measures

Control/Activity	Description
Bottom and Economizer Ash Bunkers	Concrete enclosures minimize potential for fugitive dust emissions since the area is blocked from wind.
Street Sweeper	The plant uses a street sweeper daily when CCR is displaced from the ash bunkers.

3.2 Fly Ash Handling

Unit 3 fly ash is pneumatically transported from the precipitator and stored temporarily in a fly ash silo. CCR from the baghouses is pneumatically transferred to either the recycle ash silos or the waste ash silos and can be transferred between the silos. Recycle ash is used in the lime slurry for the Unit 3 dry scrubber. Any excess CCR is loaded out from the waste ash silos and disposed in the monofill. Scrubber waste ash disposal is detailed in Section 3.3.

Unit 3 fly ash is loaded dry into trucks and transported offsite for beneficial reuse. Fly ash truck loading is completed via over-suction chute and is transported in enclosed trucks. Fly ash not used for beneficial reuse is transported to the monofill in enclosed trucks and is conditioned by water trucks. Dust control measures are described in Table 3.3.

Table 3.3 Fly ash Handling Control Measures

Control/Activity	Description
General Silo Controls	Storage silo is equipped with bin vent filter.
Dry Unloading	The dry unloading process includes a telescopic chute that lowers into enclosed tanker trucks to minimize material fall distance. The loading chute has over-suction to prevent fugitive dust emissions during unloading.
Monofill Placement	Dry fly ash sent to the monofill is conditioned with water trucks during placement. Hauling and disposal activities are halted when wind conditions are extreme when operationally feasible.

3.3 Waste Ash Handling

Waste ash is conditioned via pug mill prior to unloading and disposal in the monofill. Dust control measures are described in Table 3.4. Bottom and economizer ash from Unit 4 is mixed with waste ash as needed (see Section 3.1).

Table 3.4 Waste Ash Handling

Control/Activity	Description
General Silo Controls	Storage silo is equipped with bin vent filter.
Wet Unloading	Waste ash is conditioned to at least 20% moisture content via pug mill within silo enclosure prior to unloading.
Haul Truck Loading/Unloading	Belt skirting on the silo chute minimizes potential of fugitive dust emissions during truck loading by providing a somewhat enclosed drop zone during truck loading. When the material is placed at the monofill it has already been conditioned. Personnel unloading the trucks are responsible for observing the condition of the ash and adding water during unloading if necessary. Hauling and disposal activities are halted when wind conditions are extreme if operationally feasible.

3.4 Haul Roads

A paved haul road connects the plant to the monofill site. Haul trucks use the paved haul road to transport CCR materials. Dust control measures are described in Table 3.5.

Table 3.5 Haul Roads Control Measures

Control/Activity	Description
Haul Roads	Plant haul road is paved; this minimizes fugitive dust generation during transport. Haul trucks are limited to 80 trucks/day within the plant to minimize fugitive dust.
Street Cleaning	The plant uses a street sweeper on a daily basis, when hauling material to the monofill, to clean paved haul road of CCR material.
Enclosed/covered trucks	All haul trucks are enclosed or covered to minimize fugitive dust.

3.5 Monofill

CCR materials are transported to the onsite permitted monofill for disposal. Dust control measures at the monofill are described in Table 3.6.

Table 3.6 Monofill Control Measures

Control/Activity	Description
Water Trucks	Water trucks are used as necessary to prevent fugitive dust from becoming airborne. Wetting CCR with water serves to condition the CCR material to a moisture content that will prevent wind dispersal.
Daily Cover	If other dust controls are not adequate in mitigating fugitive dust, the site will consider the use of daily cover to be applied to CCR within the monofill.
Operations Halt	During abnormally high winds, CCR placement within the landfill is halted until conditions improve if operationally feasible.

3.6 North and South Impoundments

The North and South Impoundments were closed in 2023. Closure construction included a cover system that keeps CCR isolated. There are no anticipated activities to cause fugitive CCR dust, however, cover maintenance activities may create observable soil dust.

4. Procedures for Logging Citizen Complaints

A specific requirement of the CCR Fugitive Dust Control Plan requires owners and operators of all CCR units to develop and implement formal procedures to log citizen complaints involving CCR fugitive dust events. WSEC staff will investigate complaints to determine and verify the nature of the complaint and the factors contributing to it, including site operations at the time, location of complaint versus Monofill location, and weather conditions including wind direction. These complaints must then be included as part of the annual CCR Fugitive Dust Control Report. This report must be placed in the operating record and on the owner or operator's publicly accessible internet site.

MidAmerican logs complaints as received on the log form in Appendix A. The contact information, if provided, and the nature of the complaint will be recorded. Citizens, groups, or agencies who wish to log a complaint may do so by calling the main plant phone number at (712) 366-5330 and asking to speak with the site Environmental Coordinator. During the evening, weekends and holidays, the caller can request to log a compliant with the shift supervisor, or

request for the Environmental Coordinator to return their call within 24 hours. Complaints can also be submitted in writing to the plant address at 7215 Navajo St., Council Bluffs, Iowa 51501, Attn: Environmental Coordinator.

5. Periodic Assessment of the Plan

MidAmerican may amend the written CCR Fugitive Dust Control Plan at any time. However, MidAmerican must amend the written plan whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit. The plan and any subsequent amendments must be certified by a qualified professional engineer. As with other requirements of this rule, in order to ensure that the provisions of the fugitive dust criteria are maintained throughout the operating life of the CCR unit, MidAmerican is required to prepare an annual CCR Fugitive Dust Control Report, describing additional actions taken to control CCR fugitive dust beyond what is described in the plan, a record of all citizen complaints, and a summary of any corrective measures taken.

MidAmerican commits to assessment of this plan's effectiveness in accordance with 40 CFR 257.80(b), at a minimum, on an annual basis, during preparation of the annual CCR Fugitive Dust Control Report to identify deficiencies or additional Best Management Practices. If more effective technology techniques have been identified at the time of the review and will substantially improve dust control, the plan will be amended to reflect these changes. These changes will be implemented within [6 months] of the Plan's amendment. Additionally, these changes will be documented in the annual CCR Fugitive Dust Control Report in the year in which they are identified.

6. Annual Report

MidAmerican is required to prepare an annual CCR Fugitive Dust Control Report that includes:

– A description of the actions taken by the owner or operator to control CCR fugitive dust,
– A record of all citizen complaints, and
– A summary of any corrective measures taken.

7. Record of Revisions and Updates

Table 7.1 provides a revision record for the WSEC CCR Fugitive Dust Control Plan.

Table 7.1 CCR Fugitive Dust Control Plan Revision History.

Revision Number	Date	Revisions Made	By Whom
A	9/25/2015	Initial Issue	Burns & McDonnell
B	4/13/2017	Revised per the CCR Extension Rule to include inactive North Impoundment	Burns & McDonnell
C	11/8/2018	Revised to incorporate Unit 3 dry ash handling and Inactive South Impoundment	Burns & McDonnell
D	4/1/2025	Revised to update periodic assessment requirements and reflect closure status of North-South Impoundment	GHD

Appendices

Appendix A

Citizen Complaint Log

Walter Scott, Jr. Energy Center – CCR Fugitive Dust Complaint Log

Date	Plaintiff Location, Group, or Affiliation	Nature of Complaint	Action Taken to Mitigate Fugitive Emissions