

Coal Combustion Residual Fugitive Dust Control Plan

Osage Power Plant

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Prepared for:
Black Hills Power

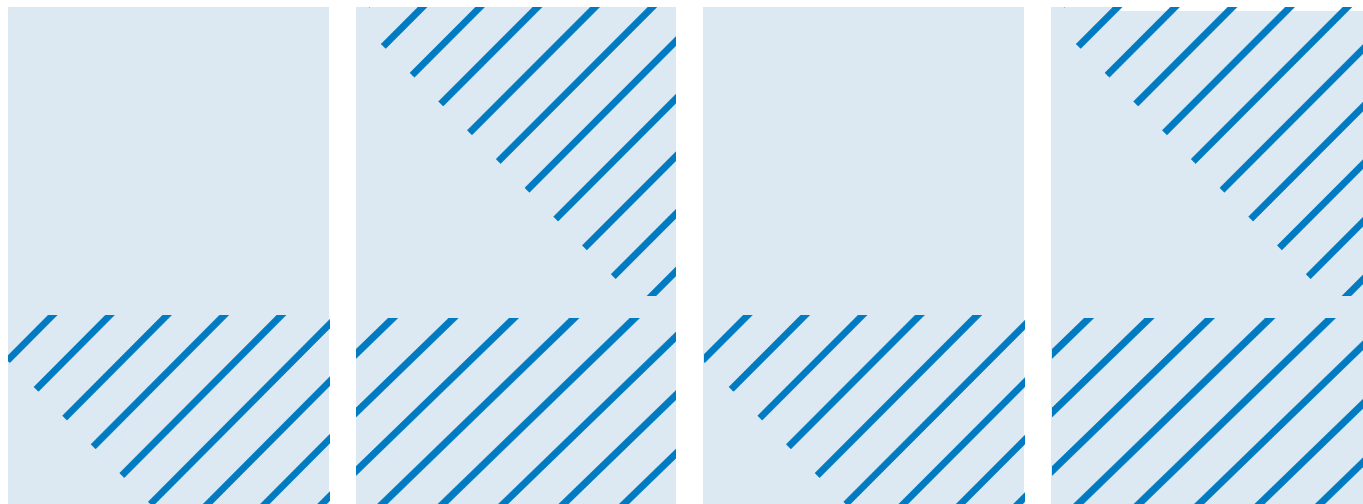
Prepared by:
Barr Engineering Co.

May 2026

Revision Number	Description of Revision	Reviser's Name	Revision Date
0	Initial fugitive dust control plan issued	Kevin Solie	May 22, 2026

4585 Coleman Street, Suite 210, Bismarck, ND 58503

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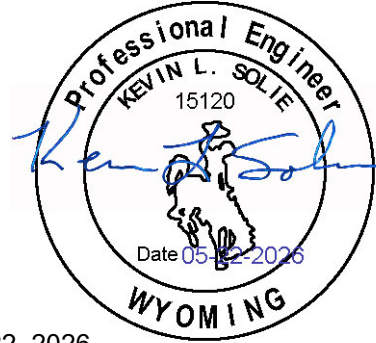


Certification

I certify that this Fugitive Dust Control Plan meets the requirements of 40 CFR § 257.80 specifying Air Criteria in the *Standards for the Disposal of Coal Combustion Residuals in Landfills and Impoundments*.



Kevin L. Solie
Wyoming PE-15120



May 22, 2026
Date

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1 Introduction and Purpose

The Coal Combustion Residuals CCR Rule (CCR Rule) was published in the Federal Register (FR) on April 17, 2015 with an effective date of October 19, 2015. The CCR Rule applied to active facilities and established location restrictions, design and operating criteria, groundwater monitoring and corrective action, and closure/post-closure care requirements. On May 8, 2024, the EPA finalized the CCR Legacy Rule (Legacy Rule), establishing new requirements for inactive surface impoundments at inactive electric utilities, termed "legacy CCR surface impoundments." Owners of these units, previously exempt from CCR Rule regulation, are now subject to the requirements for existing CCR surface impoundments. In accordance with 40 CFR § 257.100(f)(3) and 40 CFR § 257.80, the purpose of this Fugitive Dust Control Plan (Plan) is to adopt measures that will effectively minimize Coal Combustion Residuals (CCRs) from becoming airborne at the Black Hills Power (BHP) Osage Power Plant (Osage) including CCR fugitive dust originating from active and inactive CCR units, roads, and other CCR material management and material handling activities.

1.1 Definitions

Previous operation of coal-fired boilers at BHP resulted in the production of CCRs. CCRs and CCR fugitive dust are defined in 40 CFR § 257.53 (Definitions) as:

"CCR means fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers."

"CCR fugitive dust means solid airborne particulate matter that contains or is derived from CCRs, emitted from any source other than a stack or chimney."

CCRs previously generated and disposed at BHP include bottom ash and fly ash commingled with ash from sunflower seed hulls. Dust from any other sources such as coal piles, aggregate surfaced roads, soil stockpiles and other non-CCR sources are not subject to this Plan.

2 Background and Regulatory Status

The CCR Rule was published in the Federal Register (FR) on April 17, 2015 with an effective date of October 19, 2015. The CCR Rule contained a number of criteria including location restrictions, structural stability requirements, and groundwater monitoring and corrective action requirements. CCRs from BHP were deposited in a disposal area (surface impoundment) located west of the plant site. Given BHP ceased operations in 2010, it did not fall under regulation of the original CCR Rule. Based on the date BHP ceased providing power to electric power transmission systems, it is considered an “inactive facility” making it potentially regulated under the Legacy Rule. Field investigations conducted in 2025 and 2026 revealed that liquids are present in the CCRs at the closed BHP surface impoundment. As a result, the impoundment is considered a Legacy Surface Impoundment and must comply with the Legacy Rule, which mandates the development of a Fugitive Dust Control Plan.

BHP owns and previously operated Osage Power Plant, a coal-fired power plant located near Osage, Wyoming. The now-decommissioned facility included three 11.5-megawatt steam turbine generation units that were put into service between 1948 and 1952. BHP suspended operations at Osage in October 2010 and retired the facility March 21, 2014; the powerhouse was subsequently demolished. Based on a review of publicly available data from the US Energy Information Administration (EIA), Osage has not provided power to the “grid” since well before 2015. No other power generating operations occur at the site and it appears no power has been provided to transmission or distribution systems after October 19, 2015. Accordingly, Osage is classified as an “inactive facility” under the Legacy CCR Rule.

During facility operation, CCRs from the plant were placed into surface impoundments located to the south and east of the generating station. Osage Fly Ash #1 (also referred to as the Old Ash Landfill) is located east of the former generating station and appears to have operated until approximately 1993. In 1993, a permit was issued by Wyoming Department of Environmental Quality (WYDEQ) for Osage Fly Ash #2 (also referred to as the New Ash Landfill), located south and east of the former generating station. While both were operated as surface impoundments, (CCRs were conveyed to the disposal units via a water-slurry pipeline from the power plant) the units were permitted as industrial landfills by WYDEQ. The Osage CCR units are included on EPA’s list of Legacy Surface Impoundments (listed as Osage-1 and Osage-2).

The footprint of Osage Fly Ash #1 (OFA1) is approximately 6.5 acres, while Osage Fly Ash #2 (OFA2) occupies approximately 45 acres. The units have been closed and reclaimed in accordance with Wyoming Department of Environmental Quality (WYDEQ) requirements, including the installation of a cover system comprised of a two-foot-thick layer of compacted soil and an additional six inches of topsoil. The cover system was graded to promote runoff and has been revegetated with native grasses.

3 Responsibility

The BHP plant and the disposal area were decommissioned decades ago and there are no onsite personnel. Implementation of this Plan is the responsibility of BHP environmental staff (or representatives) located remotely in facilities such as those in Gillette, WY and Rapid City, SD.

3.1 CCR Production and Handling

The generating station has been decommissioned, and no generation assets are present onsite. Accordingly, no CCRs are produced or otherwise managed at the site.

3.2 Identification of Sources

There are no CCR loading, hauling or landfill operations. Potential sources for CCR fugitive dust emission include surface expressions of CCR in areas of the closure system that may have been eroded and animal burrows that may extend through the closure system into waste materials below.

3.3 Description and Justification of Controls

A 30-inch-thick final cover system was installed during site closure and cover vegetation is well-established. This engineered feature effectively eliminates the possibility of CCR fugitive dust emission from these capped and revegetated areas.

3.4 Statement of Moisture Conditioning

Not applicable at BHP. The onsite CCRs are covered with an engineered closure system; they are not transported and do not require moisture conditioning.

3.5 Establish Log for Complaints

To date, BHP has not received any complaints due to CCR dust emissions from this facility. A log for recording citizen complaints is attached (Attachment 1). Log entries include data and time of complaint, name and telephone number of person making complaint, location of reported fugitive dusting event, corrective measures taken, and current weather condition parameter estimates (including wind speed and direction, temperature, relative humidity, etc.)

3.6 Periodic Assessment and Amendment of Plan

BHP staff or other qualified person(s) will include observations for fugitive dust emissions while performing weekly and monthly inspections required by the CCR Rule at 40 CFR § 257.83 and/or § 257.84. If fugitive dust is observed, additional controls will be implemented to correct the situation. BHP will amend this Fugitive Dust Control plan whenever there is a change in conditions that would substantially affect the written plan currently in place, such as excavation of CCRs for beneficial use or other remediation.

3.7 Annual Fugitive Dust Report

BHP will prepare an annual CCR fugitive dust control report to be placed in the facility operating record by July 8th of each year, starting in 2027. The report will include 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. Agency notification and CCR public website posting will be conducted in accordance with 40 CFR § 257.106 and 40 CFR § 257.107, respectively.

Closed Osage Power Plant

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