Coal Combustion Residual
2026 Annual Fugitive Dust Control Report

Basin Electric Power Cooperative
Laramie River Station

Through October 2026

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Purpose and Definitions

40 CFR § 257.80 requires the owner or operator a Coal Combustion Residual (CCR) landfill or surface impoundment to effectively minimize CCR from becoming airborne at a facility, including CCR fugitive dust originating from CCR units, roads, and other CCR material management and material handling activities. This Annual Fugitive Dust Control Report (Annual Report) for Basin Electric Power Cooperative (Basin Electric) Laramie River Station (LRS) includes a description of the actions taken to control CCR fugitive dust, a record of all citizen complaints, and a summary of any corrective measures taken. This Annual Report for LRS CCR facilities covers the period from November 1, 2025 to November 1, 2026. Annual Reports will be completed and placed in the facility operating record no later than December 1st of each subsequent year.

LRS operates three coal-fired boilers, resulting 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 generated at LRS (and thus regulated under 40 CFR 257) include bottom ash, flue gas desulfurization (FGD) materials and fly ash.

Dust from coal piles, aggregate surfaced roads, soil stockpiles and other non-CCR sources are not subject to this plan.

Actions Taken to Control Fugitive Dust Sources

CCR loading, hauling and landfill operations present the greatest potential sources of CCR fugitive dust emissions. The facility Environmental Coordinator, Coal Yard Supervisors, all Shift Supervisors, Lead Yard Equipment Operators and Equipment Operators work collectively to ensure fugitive dust is minimized.

Fugitive dust from loading operations is predominantly controlled by the moisture-conditioning of materials. Fly ash is relatively fine-grained, and if excessively dry, has the potential for becoming airborne during loading operations. Dry fly ash is mixed with FGD slurry order to moisture-condition the fly ash before transportation and disposal. The FGD material is dewatered using hydrocyclones and pumped to mixers where it is combined with fly ash. Operators control the flow of the scrubber slurry to produce a fly ash-sludge mixture with a moisture content of 15% to 18% at the mixer outlet. Additional water may be added to create a workable mixture. To further minimize fugitive dust, fly ash and FGD material are loaded into haul trucks in a partial enclosure.

The primary means of controlling fugitive dust during CCR hauling operations is by moisture conditioning the materials (described earlier) before transport. The haul road speed limit is set at 30 mph to further limit fugitive dust emissions.

As with loading and hauling operations, the primary means of controlling fugitive dust during landfill operations is the CCR moisture conditioning that occurs before the materials are loaded into haul trucks. Since the distance from the CCR load out facility to the landfill is relatively short, moisture-conditioned CCRs arrive at the landfill with essentially the same moisture content as when initially loaded.

On areas where fly ash/FGD will not be immediately placed or on areas subject to equipment traffic, bottom ash or other non-CCR material is spread to effectively seal the area, minimizing fugitive dust. Water is spread on the landfill if needed for additional dust suppression. Finally, the practice of partial sequential closure is integral to dust suppression efforts at the facility. As areas of the landfill are brought to grade, the final cover system is installed, effectively eliminating the possibility of CCR fugitive dust emission from these capped and revegetated areas.

Bottom ash stored in CCR surface impoundments is relatively coarse-grained and not normally susceptible to dusting. Further, much of the bottom ash is submerged, again preventing any possibility of dusting. These factors (large grain-size and high moisture content) greatly reduce the probability of fugitive dust emissions of this CCR.

Citizen Complaint Log

A log for recording citizen complaints was established as part of the LRS Fugitive Dust Control Plan. To date, Basin Electric has not received any public complaints due to CCR dust emissions from this facility.

Periodic Assessments and Corrective Measures

The facility Environmental Coordinator or LRS engineering staff included observations for fugitive dust emissions while performing weekly and monthly inspections required by the CCR Rule under 40 CFR § 257.83 and § 257.84. The inspections were reviewed and note no instances when dust was observed and additional dust minimization measures were deemed necessary. As normal, the water truck was routinely dispatched, providing additional moisture to suppress dusting of CCRs in the landfill and the non-CCR materials on roadways to control road dust. I was on site during the year and observed the roadway watering applied. In general, the routine dust suppression measures employed at LRS appear to effectively control and minimize CCR fugitive dust.

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