

2024 Annual CCR Fugitive Dust Control Report

New Madrid Power Plant
New Madrid, MO

Associated Electric Cooperative, Inc.

Introduction

This Annual CCR Fugitive Dust Control Report was completed in accordance with 40 CFR 257.80(c) to document the following information:

- Description of dust control procedures implemented at the CCR units
- Summary of any concerns raised by stakeholders
- Description of any corrective actions taken

Dust Control Procedures

New Madrid Power Plant has implemented the following dust control procedures, which are applicable and appropriate for the specific site conditions.

CCR Short-Term Storage and Management Areas

The following dust control procedures will be implemented for CCR short-term storage and management areas.

- During loading and unloading activities, drop height is kept low to reduce the potential for mobilization of CCR dust.
- During high wind conditions, loading and management operations may be reduced or halted.
- Water spray may be applied, as needed, to CCR piles during processing, staging, and/or transportation. Manual water spraying, or water trucks, are used as needed.

CCR Surface Impoundment Units

In CCR surface impoundments (SI), CCR are stored as a slurry mixture with high water content and the wetted CCR pond surface is present at a lower elevation than its surroundings (e.g., vegetated berms) and would not be expected to cause dusting. However, as the SI is being filled or drained, the CCR may be stacked or exposed above the pond water level, and, based on these conditions, CCR can become airborne during storage in the CCR SI. The stacked or exposed areas are treated appropriately with water spray, as needed, until the material can be removed and disposed of properly. In addition, areas of stacked material may be vegetated if extended periods of inactivity are expected.

When CCR are dredged from a CCR SI, additional dust control procedures may be employed during dewatering and subsequent transportation for disposal or beneficial reuse if the CCR become dry, as discussed in Section 3.1 for short-term storage and management areas.

CCR Landfill Units

CCR will be conditioned and placed into the New Madrid Utility Waste Landfill in accordance with 40 CFR 257.80(a). Water will be added to the CCR materials to reduce any wind dispersal and improve compaction during CCR placement in landfill units. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust suppression agent.

The following additional dust control procedures will be implemented for active CCR landfill units.

- Open or active landfill cell or subcell areas are reduced to the extent possible, and the working face will be maintained as small as feasible.
- During loading and unloading activities, the drop height will be minimized to control mobilization of CCR dust.
- Water spray or chemical dust suppressant is applied to the exposed CCR, including on the working face, as needed.
- During high wind conditions, unloading operations at the working face may be reduced or halted.

Facility Roads

The following dust control procedures will be implemented for roads in active use for CCR management activities at the Facility, or that are being traveled by construction equipment employed in CCR management activities.

- Reduced vehicle speed limits are enforced to reduce dust mobilization.
- During high wind conditions, operations and related traffic may be reduced or halted.
- Prior to transportation, CCR is conditioned, meaning water is used to add moisture to the ash, using the pin mixer to control mobilization of CCR dust.
- During non-freezing weather, unpaved roads at the Facility are sprayed as needed throughout the day using water trucks.
- During freezing weather, a solution of calcium chloride (or equivalent hygroscopic product) or other dust suppression agent may be applied on the unpaved roads. Hygroscopic materials attract moisture from the atmosphere and its surroundings, so unpaved surfaces will remain damp and fugitive dusting will be reduced during freezing weather.
- Paved roads at the Facility are maintained to ensure that the physical integrity of the pavement is adequate to achieve control of fugitive emissions from these roads.

Good housekeeping measures are implemented at all areas of the Facility. In addition, trucks and vehicles that have the potential to track ash, mud, or dust outside of the CCR management area(s) are cleaned, as needed.

Citizen Complaints

No citizen complaints were received at the New Madrid Power Plant in 2024.

Summary of Corrective Measures

No corrective measures were required during this reporting period.