

2021 Annual CCR Fugitive Dust Control Report

Thomas Hill Energy Center
Clifton Hill, 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

Thomas Hill Energy Center 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 short-term storage, a berm, enclosure, or partial enclosure is maintained to provide a wind break around the CCR staging area.
- 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 or chemical dust suppressant is applied, as needed, to CCR piles during staging or transportation. Manual water spray is 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., berms) and would not be expected to cause dusting. However, as the surface impoundments are 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.

If dry CCR areas are observed during dry weather conditions, it may be possible to adjust the CCR SI water level upward to hydrate these areas and reduce the potential for CCR to become airborne. In addition, these areas may be manually sprayed with water to control mobilization of dust mobilization.

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.

Mine Reclamation

CCR materials including fly ash, bottom ash, and boiler slag are transported by trucks from the Facility to the Prairie Hill Mine Reclamation areas located south of the Facility for placement in

the mine as part of the coal mine reclamation. Water will be added to the CCR materials to reduce any wind dispersal and improve compaction during CCR placement.

The following additional dust control procedures will be implemented for CCR placement as part of coal mine reclamation.

- Active 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.

When active CCR operations are completed in a given area, as well as prior to any long-term inactivity in a given area, the areas are contoured as needed to reduce the slopes of any exposed CCR.

Following installation, the final cap and cover, including vegetation, are maintained to reduce the potential for CCR becoming exposed to the atmosphere and airborne.

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 by adding water to the ash to control mobilization of CCR dust. If ash is transported dry, it may be transported in a fully enclosed trailer or covered using well-fitted tarps to reduce the potential for CCR becoming airborne during truck transport.
- 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 to reduce fugitive dusting.
- 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 Thomas Hill Energy Center in 2021.

Summary of Corrective Measures

No corrective measures were required during this reporting period.