

## BIG RIVERS ELECTRIC CORPORATION

# CCR FUGITIVE DUST CONTROL PLAN



COLEMAN GENERATING STATION 4982 RIVER RD., HAWESVILLE, KY 42348

AGENCY INTEREST NO. 1640 KENTUCKY PERMIT NO. KY0001937

> REVISION NUMBER 0 DATE: NOVEMBER 8, 2024

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# **List of Abbreviations**

Abbreviation	Term/Phrase/Name
BREC	Big Rivers Electric Corporation
CCR	Coal Combustion Residuals
CCR Rule	Federal Coal Combustion Residual Rule
CFR	Code of Federal Regulations
Coleman Station	Former Kenneth C. Coleman Generating Station
EPA	Environmental Protection Agency
LSI	Legacy Surface Impoundment
Plan	CCR Fugitive Dust Control Plan



#### **Index and Certification**

Big Rivers Electric Corporation CCR Fugitive Dust Control Plan Project No. 177233

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#### Certification

I hereby certify, as a Professional Engineer in the state of Kentucky, that the information in this document was assembled under my direct personal charge. This report is not intended or represented to be suitable for reuse by Big Rivers Electric Corporation or others without specific verification or adaptation by the Engineer.



Matt Bleything, P.E. (KY 37673)

Date: November 7, 2024



#### 1.0 Introduction

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 coal combustion residual (CCR) materials generated at coal-fired power plants. Subsequently, on May 8, 2024, EPA finalized changes to the federal CCR rule requiring owners and operators of inactive legacy CCR surface impoundments (LSI) at inactive facilities to comply with all existing requirements applicable to inactive CCR surface impoundments at active facilities, as defined in the federal CCR Rule. These regulations are codified in Subpart D of Part 257 of Title 40 of the Code of Federal Regulations (CFR).

Big Rivers Electric Corporation's (BREC) former Kenneth C. Coleman Generating Station (Coleman Station) is subject to the CCR Rule and, in response, has developed this CCR Fugitive Dust Control Plan (Plan) for handling and disposing CCR per 40 CFR §257.80(b). The Coleman Station, located in Hancock County, Hawesville, Kentucky, has been deactivated since 2014 and demolition activities are ongoing. Figures showing the facility layout are included as Appendix A.

This Plan is in addition to, and does not supersede, any other applicable permits, environmental standards, or work safety practices.



#### 2.0 **Plan Objectives**

This Plan identifies the control measures and practices to minimize and control fugitive dust at the Coleman Station as required by 40 CFR 257.80. The Plan defines how BREC personnel and subcontractors will mitigate CCR dust emissions at the station.

To meet these objectives, the Plan:

- Identifies potential CCR fugitive dust sources at the Coleman Station;
- Identifies control measures and practices to minimize CCR fugitive dust;
- Identifies fugitive dust control record-keeping requirements;
- Identifies fugitive dust control notification requirements; and
- Describes procedures that BREC will follow to periodically assess the effectiveness of the Plan.

It is recommended that once the plan is finalized, it should be maintained in the facility's operating record and posted on BREC's publicly accessible Internet website. Notification of the Plan's availability should also be sent to the State Director.



#### 3.0 Fugitive Dust Sources and Controls

BREC owns the Coleman Station, which formerly operated as a steam generating facility. Due to the inactive status of the Coleman Station, the only remaining potential source of CCR fugitive dust emissions are from the inactive surface impoundments that previously accepted CCR material during the station's operations.

The facility consists of four inactive CCR surface impoundments. Three inactive surface impoundments are located on the immediate property of the former steam generating facility (see Appendix A – Figure 1), including inactive Ash Pond  $A^1$ , inactive Ash Pond  $B^2$  (an ash pond reclaimed for beneficial reuse as parking and external storage), and inactive Ash Pond  $C^3$ . The fourth inactive surface impoundment, referred to as inactive Ash Pond  $D^4$ , is located approximately a mile north of the main facility property (see Appendix A – Figure 2). Surface impoundments containing CCR material are a potential source of fugitive dust emissions when disturbances, such as extreme wind or excessively dry surface conditions, cause CCR material to become airborne. Dust control measures that may be utilized as needed to mitigate the mobilization of fugitive dust from these inactive CCR surface impoundments are described in Table 1:

Table 1: Dust Control Measures for Inactive CCR Surface Impoundments

Control/Activity	Description	
Disturbance Area Minimization	Minimize the amount of exposed CCR or surface disturbance. Disturbances in and around the surface impoundments are infrequent due to their inactive status and decommissioning of the Facility.	
Water Trucks	If an area of concern is identified, wet CCR material in the area, as needed, to enhance cohesion and reduce the potential for airborne particles. CCR material shall not be watered beyond the point of saturation.	
Dust Suppressant Chemical	If an area of concern is identified, apply EPA approved chemical dust suppressants, as needed, to bind dust particles together and prevent fugitive dust emissions.	
Cover Materials	If an area of concern is identified, apply and/or establish cover materials, as needed, (such as soil, vegetation, aggregate, tarps, etc.) to cover and stabilize CCR material and mitigate fugitive dust. If needed, cover materials should be routinely inspected and repaired to maintain sufficient dust control.	

Several gravel service and access roads adjacent to the inactive CCR surface impoundments support infrequent vehicle traffic for personnel and maintenance purposes. These roads are not comprised of CCR and are not considered a source of CCR fugitive dust. However, if one of these roads is ever identified as an area of concern due to accumulation of CCR fugitive dust on the road surface adjacent to a surface impoundment, Table 2 specifies additional actions that could be taken to minimize concerns.

<sup>&</sup>lt;sup>4</sup> Ash Pond D is also referred to in past documents as "New Ash Pond", "Wastewater Treatment Facility", and "West Ash Pond."



<sup>&</sup>lt;sup>1</sup> Ash Pond A is also referred to in past documents as "Active Recirculation Ash Pond" and "Active Ash Pond A." Note that Ash Pond A is inactive. "Active Recirculation Ash Pond" and "Active Ash Pond A" are outdated names.

<sup>&</sup>lt;sup>2</sup> Ash Pond B is also referred to in past documents as "North Ash Pond", "Ash Pond Reclaimed for Beneficial Reuse", and "Beneficial Reuse Ash Pond."

<sup>&</sup>lt;sup>3</sup> Ash Pond C is also referred to in past documents as "South Ash Pond."

Table 2: Dust Control Measures for Service & Access Roads Around Inactive Surface Impoundments

Control/Activity	Description		
Cleanup	Remove buildup of CCR fugitive dust from areas on roads to prevent it from spreading and perform road maintenance as needed.		
Speed Limit	If needed, a speed limit shall be implemented for vehicles operating on service and access roads.  Speed limit signage shall be displayed at facility entrance.		
Road Maintenance	Maintain roads, as necessary, by placing crushed rock surfacing or grading to prevent fugitive dust emissions.		

In addition to the controls outlined in this plan, BREC should adhere to the controls and Best Management Practices that are required and outlined in the site's permits and plans.



#### 4.0 Citizen Complaint Log

The CCR Rule (§257.80[b][3]) requires owners and operators of all CCR units to develop and implement formal procedures for logging citizen complaints involving CCR fugitive dust events. BREC personnel will review and document all received complaints for inclusion in the Annual CCR Fugitive Dust Control Report (see Section 6.0).

When a complaint is received, BREC personnel will initiate an investigation of the source of the CCR fugitive dust and an evaluation of the controls in place for the particular area identified as the cause of the problem. If the event is due to high winds or abnormal operating conditions, plant personnel may implement a short-term solution, which does not require an amendment of this Plan. If the issue is determined to be one that may be continuous or may reoccur in the future, BREC will reevaluate controls within the plan to determine if an amendment to the Plan needs to be made.

BREC shall log citizen complaints as received on the log form in Appendix B. The following relevant information, if provided by the complainant, shall be included in the record:

- Date the complaint was received,
- Name of complainant,
- Contact information for the complainant such as address, phone number, and/or email address,
- Nature of complaint,
- Corrective action or response taken by the facility.



#### 5.0 Amendments and Periodic Assessments

BREC may amend this Plan at any time in accordance with the CCR Rule (§257.80[b][6]). However, should there be a change in conditions that would substantially impact the Plan, BREC is required to revise the Plan accordingly to maintain compliance with 40 CFR 257.80. Each subsequent plan revision must be certified by a qualified professional engineer. The most recent version of the Plan should be maintained in the facility's operating record and posted on BREC's publicly accessible Internet website. Notification should also be sent to the State Director of the amendment to the plan.

BREC shall periodically reviewing this plan to assess its effectiveness. The assessment will include a review of all procedures pertinent to fugitive dust management at the former Coleman Station and records maintained in accordance with this plan.



## 6.0 Annual Report

In accordance with the CCR Rule ((§257.80[c]), BREC must 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.

The initial CCR Fugitive Dust Control Plan must be completed no later than 14 months after placing the initial CCR Fugitive Dust Control Plan in the facility's operating record. The deadline for completing a subsequent report is one year after the date of completing the previous report. The Annual Report is considered complete when the Report has been placed in the facility's operating record. Once placed in the operating record, it is recommended that the annual report be posted on BREC's publicly accessible Internet website. Notification of the Annual Report's availability should also be sent to the State Director.



#### APPENDIX A - FACILITY LAYOUT FIGURES



IMAGE REFERENCE: GOOGLE EARTH, IMAGE DATED OCTOBER, 2024 Z:\Clients\ENS\BigRiversEC\177233\_ColemanFDCP\Design\CADD\Dwgs\P1

#### APPENDIX B - CITIZEN COMPLAINT LOG



# **Coleman Station – CCR Fugitive Dust Complaint Log**

Date	Name of Complainant	Nature of Complaint	Corrective Action Taken to Mitigate Fugitive Emissions

# **Coleman Station – CCR Fugitive Dust Complaint Log**

Date	Name of Complainant	Nature of Complaint	Corrective Action Taken to Mitigate Fugitive Emissions

#### APPENDIX C - VISIBLE EMISSIONS LOG



# Coleman Station – CCR Visible Emissions Log

Date	Time	Visible Emissions (Yes or No)	Source of Fugitive Dust Emission (Location/Area)	Corrective Action Taken to Mitigate Fugitive Emissions

# Coleman Station – CCR Visible Emissions Log

Date	Time	Visible Emissions (Yes or No)	Source of Fugitive Dust Emission (Location/Area)	Corrective Action Taken to Mitigate Fugitive Emissions

#### APPENDIX D - FUGITIVE DUST CONTROL LOG



# **Coleman Station – Fugitive CCR Dust Control Log**

Date	Time	Control Method	Comments

# **Coleman Station – Fugitive CCR Dust Control Log**

Date	Time	Control Method	Comments

