



# CCR Fugitive Dust Control Plan



**Kansas City  
Board of Public Utilities**

**Nearman Creek Power Station  
Project No. 87813**

**Revision A  
October 2015**



# **CCR Fugitive Dust Control Plan**

prepared for

**Kansas City Board of Public Utilities  
Nearman Creek Power Station  
Kansas City, Kansas  
4240 N. 55<sup>th</sup> St.  
Kansas City, Kansas 66104  
Permit No. 0413**

**Project No. 87813**

**Revision A  
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prepared by

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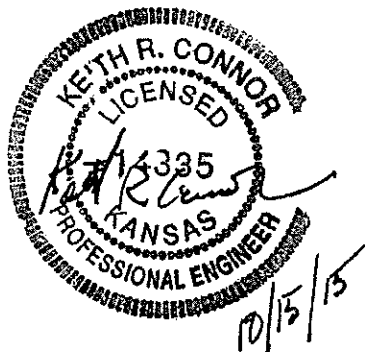
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#### Certification

I hereby certify, as a Professional Engineer in the state of Kansas, 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 the Kansas City Board of Public Utilities or others without specific verification or adaptation by the Engineer.

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Date: October 15, 2015



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**LIST OF ABBREVIATIONS**

<b><u>Abbreviation</u></b>	<b><u>Term/Phrase/Name</u></b>
CCR	Coal Combustion Residuals
EPA	Environmental Protection Agency
KCBPU	Kansas City Board of Public Utilities
KDHE	Kansas Department of Health and the Environment
MW	Megawatts

## 1.0 INTRODUCTION

On April 17, 2015, the United States Environmental Protection Agency (EPA) published the final Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments (CCR Rule) relating to the disposal of coal combustion residuals (CCR) materials generated at electric utilities coal-fired units. The CCR Rule was promulgated pursuant to the Resource Conservation and Recovery Act (RCRA, 42 U.S.C. §6901 et seq.), using the Subtitle D approach and is found at 40 C.F.R. § 257.1 *et seq.*

The Kansas City Board of Public Utilities (KCBPU) Nearman Creek Power Station, hereinafter referred to as the “Facility,” is subject to the CCR Rule. As such, KCBPU has developed this CCR Fugitive Dust Control Plan (Plan) for handling and disposing of CCR per 40 C.F.R. 257.80. This Plan provides the means and methods for minimizing CCR from becoming airborne at the Facility.

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 control measures and practices to minimize the potential for CCR to become airborne as required by the CCR Rule. This Plan:

- Identifies potential CCR fugitive dust emission sources at the Facility;
- Identifies and describes the control measures and practices to minimize CCR fugitive dust emissions that are most appropriate for site conditions at the Facility;
- Identifies CCR fugitive dust control recordkeeping requirements;
- Identifies CCR fugitive dust control notification requirements;
- Describes procedures that KCBPU will follow to periodically assess the effectiveness of the Plan.



### 3.0 FUGITIVE DUST SOURCES AND CONTROL MEASURES

The Facility is a single, coal-fired unit nameplated at 261 MW. The Kansas City Board of Public Utilities (KCBPU) is a wholly owned administrative agency of the Unified Government of Wyandotte County. CCR produced at the Facility includes fly ash and bottom ash. Fly ash generated by the Facility is transported offsite for beneficial use. Bottom ash is handled wet and managed in an onsite CCR surface impoundment. In addition to the control measures outlined in this Plan, KCBPU adheres to controls and Best Management Practices that are required and outlined in other applicable site permits and plans. Table 3-1 lists the potential CCR fugitive dust emission sources identified at the Facility, briefly describing operations at each source.

**Table 3-1: CCR Fugitive Dust Sources**

Source Name	Description
Bottom Ash Handling	Sluiced to CCR surface impoundment for management
Fly Ash Handling	Handled dry and transported pneumatically to silo for unloading. Ash is trucked offsite for beneficial use.
Access & Haul Road	Transport road around the CCR surface impoundment
CCR Surface Impoundment	Management area for wet sluiced bottom ash

#### 3.1 Bottom Ash Handling

Bottom ash is handled wet and sluiced to the CCR surface impoundment at the Facility. Since the ash is sluiced in a wet condition via pipeline to the CCR surface impoundment, there are no potential CCR fugitive dust emissions sources in the handling of bottom ash at the Facility, both at the source of the ash and at the discharge point within the CCR surface impoundment. Ash sluiced to this impoundment is ultimately removed and hauled offsite for beneficial use. Dust control measures at the CCR impoundment is discussed in Section 3.4.

#### 3.2 Fly Ash Handling

During normal operations, fly ash is pneumatically transported from the precipitator and stored temporarily in a silo. During maintenance activities, fly ash is removed and stored in steel disposal containment units or directly transported via vacuum trucks from the site to the Johnson County Special Use Landfill under an approved special waste authorization permit from the Kansas Department of Health and the Environment (KDHE). Fly ash handling dust control measures are described in Table 3-2.

**Table 3-2: Fly Ash Control Measures**

Control/Activity	Description
General Silo Controls	Storage silo is equipped with a bin vent filter.
Dry Unloading	The dry unloading process includes telescopic chutes that lower into haul trucks to minimize material fall distance. The loading chute has over-suction to minimize fugitive dust emissions during unloading. Tanker trucks are enclosed.

**3.3 Access and Haul Road**

The Facility has an access road leading from the generating unit to the CCR surface impoundment. The road at the surface impoundment is gravel, and used by plant personnel for access during normal daily operations. Trucks only utilize this access road to perform maintenance activities as needed, or to intermittently transport bottom ash offsite when it is removed from the CCR surface impoundment. Dust control measures are described in Table 3-3.

**Table 3-3: Access and Haul Road Control Measures**

Control/Activity	Description
Access and Haul Roads	Access and haul roads at the surface impoundment have speed limit signs posted to lower potential for fugitive dust emissions. Roads are used to perform maintenance activities as needed.

**3.4 CCR Surface Impoundment**

Bottom ash is sluiced to the CCR surface impoundment. The majority of bottom ash on-site is removed intermittently and hauled from the CCR surface impoundment offsite for beneficial use. Dust control measures for the CCR surface impoundment are described in Table 3-4.

**Table 3-4: CCR Surface Impoundment Control Measures**

Control/Activity	Description
Wet Sluicing	Material is sluiced in a wet condition and placed in the CCR surface impoundment. Generally there are no fugitive dust issues near the CCR surface impoundment.

#### **4.0 PROCEDURES FOR LOGGING CITIZEN COMPLAINTS**

The CCR Rule requires owners and operators of all active CCR units to develop and implement formal procedures to log citizen complaints involving CCR fugitive dust events. These complaints must, then, be included as part of the annual CCR Fugitive Dust Control Report. This annual report must be placed in the Facility's written operating record and on KCBPU's publicly accessible CCR internet site.

Each time a complaint is received, the Environmental Director will work with plant personnel to initiate an investigation of the source of the CCR fugitive dust and an evaluation of the controls in place for the particular area or process identified as the cause of the problem. If the event is random and 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, plant personnel and the Environmental Director will reevaluate controls within the plan to determine if an amendment to the Plan needs to be made.

KCBPU shall log citizen complaints as received on the log form in Appendix A. Citizens, groups, or agencies who wish to make a CCR fugitive dust complaint may do so by sending an email via the "Contact Us" link posted on the KCBPU CCR Rule Compliance Data & Information website.

## 5.0 PERIODIC ASSESSMENT/AMENDMENT OF THE PLAN

KCBPU may amend this Plan at any time in accordance with the CCR Rule. KCBPU must amend the Plan whenever there is a change in conditions that would substantially affect the Plan, such as the construction and operation of a new CCR unit. The Plan and any subsequent amendments must be certified by a qualified professional engineer.

In addition to Plan evaluation following citizen complaints, KCBPU commits to a detailed assessment and evaluation of the effectiveness of the overall Plan on an annual basis, during preparation of the annual CCR Fugitive Dust Control Report. In addition to annual assessment, KCBPU performs inspections and monitors CCR fugitive dust through the weekly inspections and shall mitigate any potential issues noted during these inspections.

## 6.0 ANNUAL REPORT

KCBPU is required to 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 Report must be completed no later than 14 months after placing the initial CCR Fugitive Dust Control Plan in the Facility's written operating record. The deadline for completing a subsequent annual report is one year after the date of completing the previous annual report. The annual CCR Fugitive Dust Control Report is complete when such Report has been placed in the Facility's operating record.

**APPENDIX A - CITIZEN COMPLAINT LOG**

Nearman Creek Power Station – CCR Fugitive Dust Complaint Log

Date	Plaintiff Location, Group, or Affiliation	Nature of Complaint	Action Taken to Mitigate Fugitive Emissions

Nearman Creek Power Station – CCR Fugitive Dust Complaint Log

Date	Plaintiff Location, Group, or Affiliation	Nature of Complaint	Action Taken to Mitigate Fugitive Emissions





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