AMEREN MISSOURI: Labadie Energy Center

### Initial CCR Fugitive Dust Control Plan

Rev	Date	Revisions	Originator	Reviewer	Approver
0	10/1/15	Initial issue	10/12/15	COLL	10/16/15
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#### **PROFESSIONAL ENGINEER CERTIFICATION**

I certify and attest that the Plan meets the requirements of 40 CFR Part 257.80.



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#### 1.0 INTRODUCTION

The purpose of this Dust Control Plan is to identify and describe the measures that Ameren Missouri will use to minimize Coal Combustion Residuals (CCR) from becoming airborne at its facilities. The Plan is prepared in accordance with the Environmental Protection Agency Coal Combustion Residuals (CCR) Rule, 40 CFR Part 257.80. The Plan addresses CCR fugitive dust monitoring, corrective actions to be implemented including work activity changes, logging of any dust complaints, and procedures to assess the effectiveness of the Plan.

The overall intent will be to effectively minimize CCR from becoming airborne at the Labadie Energy Center, including fugitive dusts originating from CCR units, roads, and other CCR management and material handling activities. This Plan is not intended to cover fugitive dust that are unrelated to CCR management or that are not comprised of CCR materials (e.g. wind-blown dust resulting from farming activities near Ameren facilities or fugitive dust from non CCR related roads).

#### 2.0 REQUIREMENTS FOR CCR FUGITIVE DUST CONTROL PLAN MANAGEMENT

#### 2.1 RESPONSIBILITIES

Designated Site Representative: The designated site representative (DSR) shall be responsible for overall administration of the CCR Fugitive Dust Control Plan. The DSR shall also be responsible for responding to CCR fugitive dust complaints and implementing the appropriate dust control action. The DSR shall ensure that Ameren Missouri CCR staff and CCR contractor staff are trained in accordance with the requirements of this Plan as required in Section 2.4. The DSR shall ensure that CCR Fugitive Dust Control Plan is included in the CCR operating record required by Section 2.2 and 40 CFR 257.105(g). The DSR shall ensure inspections are performed as required by Section 5 to assess conditions and the potential for CCR fugitive dust and determine the need for changes to the implementation of dust control measures.

Ameren Missouri Staff: Ameren Missouri staff is responsible for notifying the site representative of significant CCR fugitive dust, when observed. The notification should include a description of the source location of the CCR dusting event and the time when it was observed and any other information deemed relevant to the event. Relevant information may include weather conditions, operations in the area of the event, etc.

Ameren Missouri CCR Contractor Staff: Ameren Missouri CCR contractor staff is responsible for conducting work in a manner that minimizes the generation of CCR fugitive dust. Contractor staff are also responsible for notifying their site contact or the DSR if CCR operations appear to be generating significant amounts of CCR fugitive dust and to take steps to minimize dust generation in accordance with the requirements of this Plan and as directed by the DSR..

#### 2.2 OPERATING RECORD

Ameren Missouri shall maintain a written record of this Plan on file in accordance with 40 CFR 257.80(b)(5), 257.105(g)(1) and Ameren's record retention policy. The Plan shall be certified as meeting the requirements of 40 CFR 257.80 by a qualified professional engineer prior to inclusion in the Operating Record.

The operating record shall be updated annually (every 12 months) to include the Annual CCR Fugitive Dust Control Report required in Section 5 of the Plan and 40 CFR 257.80(c) and 257.105(g)(2).

Notification shall be made to the Missouri DNR upon each update to the operating record as required by 40 CFR 257.106(g)(1) and (g)(2). Electronic copies of the CCR Fugitive Dust Control Plan and the CCR Fugitive Dust Control Report shall be posted to the internet upon inclusion in the Operating Record as required by 40 CFR 257.107(g).

#### 2.3 COMPLAINT LOG

Ameren Missouri staff will document dusting complaints received from outside parties and notify the DSR of all complaints. The complaint documentation, shall include; date and time the complaint was received; date, time and location of the observations leading to the complaint; nature of the complaint; and the contact information for the complaining party. (Refer to Attachment 1). The DSR, or his/her representative, shall investigate the nature of each complaint and determine the need for any changes to the implementation of dust control measures. Ameren Missouri staff will also meet routinely as described in Section 5 to discuss the Plan effectiveness, assess dust control measures, and discuss any dusting complaints received.

#### 2.4 PERSONNEL TRAINING

Ameren Missouri will conduct dust control training for CCR facility related personnel as necessary. Training topics shall include, but not be limited to: the importance of dust control, individual responsibilities, purpose of inspections, documentation requirements, the potential sources of dust, dust control measures being employed on-site and corrective actions in the event of fugitive dust. All CCR facility personnel have responsibility for CCR fugitive dust control. Any facility staff who observes fugitive dust related to CCR handling shall respond as appropriate in accordance with this Plan.

#### 3.0 POTENTIAL CCR FUGITIVE DUST SOURCES

Attachment 2 lists the potential CCR fugitive dust sources.

#### 4.0 OPERATING PRACTICES AND CONTROL MEASURES

The practices and control measures that will be implemented for the potential fugitive dust sources listed on Attachment 2 are described below.

#### 4.1 CCR HANDLING SYSTEMS AND EQUIPMENT

- Primary Controls: System design and maintenance programs.
- Contingent Controls: Implement appropriate system repairs to address fugitive dust.
- Practices: Ameren Missouri staff will perform visual inspections as necessary to verify dust controls are effective. Appropriate primary and contingent control actions will be implemented if fugitive dust is observed.
- Primary and Contingent Control Applicability: Industry has historically used proper design and maintenance of CCR handling systems and equipment to control the potential for fugitive dust.

#### 4.2 ROADWAYS AND HAUL ROADS

- Primary Controls: Traffic control (e.g. controlling routes, speeds, and movements to mitigate CCR fugitive dust). Watering of roadways shall be performed as conditions require.
- Contingent Controls: Increased application of primary controls. Apply a dust control agent additive with water application. Alter work activities during high wind conditions.

- Practices: Ameren Missouri staff will be diligent in observing for visible CCR fugitive dust and take appropriate primary and contingent control actions to address the fugitive dusting condition.
- Primary and Contingent Control Applicability: Industry has historically used surface water application and/or traffic changes to prevent and control the potential for fugitive dust on roadways and haul roads. Watering and dust control agents are very effective control measurements, particularly when used in combination with traffic control measures on roadways.

#### 4.3 CCR PONDS

- Primary Controls: Watering shall be performed as conditions require.
- Contingent Controls: Increased application of primary controls. Apply a dust control agent additive
  with water application. Cover dusting surface with coarse aggregate materials. Reconfiguration of
  surface contours and windbreaks. Alter work activity functions.
- Practices: Ameren Missouri staff will perform visual inspections as necessary to verify CCR fugitive dust controls are effective. Appropriate primary and contingent control actions will be implemented if fugitive dust is observed.
- Primary and Contingent Control Applicability: Industry has historically used surface water application to control dust. Watering, dust control agents, and coarse aggregate material applications are very effective dust control measurements, particularly when used in combination with changes to work activities.

#### 4.4 CCR OPERATIONS (DIGGING, LOADING, HAULING AND PLACEMENT ACTIVITIES)

- Primary Controls: Watering, covering of CCR materials during hauling, limiting drop height of CCR materials during loading.
- Contingent Controls: Increased application of primary controls. Apply a dust control agent additive
  with water application. Cover dusting surface with coarse aggregate materials. Alter work activity
  functions.
- Practices: Ameren Missouri staff will perform visual inspections as necessary to verify CCR fugitive dust controls are effective. Appropriate primary and contingent control actions will be implemented if fugitive dust is observed.
- Primary and Contingent Control Applicability: Industry has historically used surface water
  application to control fugitive dust. Watering, dust control agents, and coarse aggregate material
  application are very effective dust control measurements, particularly when used in combination
  with changes to work activities.

#### **5.0 PLAN QUALITY ASSURANCE AND QUALITY CONTROL**

Ameren Missouri staff shall observe the CCR related facilities and operations to assess conditions and determine the need for any changes to fugitive dust control measures.

#### 5.1 INSPECTIONS

Ameren Missouri staff will conduct inspections of CCR related facilities as part of the effort to periodically assess the effectiveness of the Plan in accordance with 40 CFR 257.80(b)(4). Inspections shall include areas where CCR fugitive dust generation may be observed based on on-going operations or maintenance activities taking place at the time of the inspection. A log /record shall be kept identifying the date and time of each inspection and the inspection results. Substantial fugitive dust will be noted in the log as well as the underlying cause of the CCR fugitive dust, any corrective measures undertaken or alternative dust control measures recommended for implementation.

#### **5.2 PLAN QUALITY CONTROL**

The DSR, Ameren Missouri and CCR contractor staff will hold meetings as necessary to discuss and assess the overall effectiveness of the Plan and dust control measures as required by 40 CFR 257.80(b)(4). The fugitive dust complaint log will also be reviewed to identify any areas of concern. The purpose of these meetings will be to evaluate the sources of dusting, the effectiveness of the implemented dust control measures, and the need to update or revise the Plan and/or operations to minimize the potential for future CCR fugitive dust. The goal will be to improve the overall effectiveness of the Plan and dust control measures.

Updates to the Plan shall be made as determined by the DSR and Ameren Missouri staff. Updates shall become effective once certified and included in the Operating Record described in Section 2.2. Updates shall be required whenever there is a change in conditions of the Plan that substantially affects implementation of the Plan such as the construction and operation of a new CCR unit as required by 40 CFR 257.80(b)(6).

#### **5.3 ANNUAL REPORT**

The DSR and Ameren Missouri staff will annually prepare a CCR fugitive dust control report that shall include 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 report will be placed in the facility operating record in compliance with the requirements of the Environmental Protection Agency Coal Combustion Residuals Rule, 40 CFR Part 257.80(c) and 257.105(q).

## ATTACHMENT 1

# **Fugitive Dust Citizen Complaint Log**

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RECEIVED DUST EVENT DETAILS	Comments/Other				
	Dust Source and Location Description				
	Time Dusting Observed				
	Date Dusting Observed				
COMPLAINT BACKGROUND DETAILS	Contact Information				
	Name Provided				
	Time Received				
	Date Received				

#### **ATTACHMENT 2**

#### **Potential Source Dust Control Matrix**

Potential CCR Dust Source	<b>Primary Control Methods and Practices</b>	Contingent Control
CCR Handling Systems	<ul> <li>System design and maintenance programs</li> </ul>	<ul> <li>Implement system repair functions</li> </ul>
Roadways and Haul Roads	<ul> <li>Water application</li> <li>Traffic changes, e.g. routes, speeds, movements</li> </ul>	<ul><li>Apply dust control agent</li><li>Alter work activities</li></ul>
Ponds	Apply water	<ul> <li>Apply dust control agent</li> <li>Alter work activities</li> <li>Cover with coarse aggregate</li> <li>Reconfigure surface contours and windbreaks</li> </ul>
CCR Operations	<ul> <li>Apply water</li> <li>Cover CCR during hauling</li> <li>Limit drop heights for CCR materials</li> </ul>	<ul> <li>Apply dust control agent</li> <li>Alter work activities</li> <li>Cover with coarse aggregate</li> </ul>