

# CCR Dust Control Plan

**San Miguel Electric Cooperative, Inc.**

**Christine, Texas**

October 2, 2015

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San Miguel Electric Cooperative, Inc.

# CCR Dust Control Plan

## *Christine, Texas*

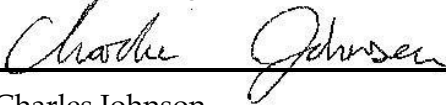
October 2, 2015

Project No. 0303548  
Christine, TX



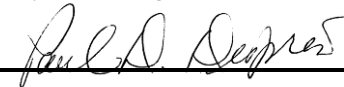
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## RECORD OF TECHNICAL PLAN AMENDMENTS, REVISIONS OR REVIEWS

Technical amendments/revisions to this Dust Control Plan should be recorded here. A P.E. certification is required for technical changes and must be included on a new certification page – See Section 2.

Date	Amendment/ Revision or Update	Summary of Changes to Plan and/or Update Observations	Pages or Sections Changed
10/02/2015	Initial	Initial Plan Issued	Entire Plan

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## 1.0 INTRODUCTION

San Miguel Electric Cooperative, Inc. (SMECI) owns and operates a 440-MW mine-mouth, lignite-fired generating plant and associated mining facilities in Christine, Texas. The plant generates coal combustion residuals (CCR) that are subject to regulation under Title 40, Code of Federal Regulations, Part 257 (40 CFR Part 257).

This document serves as the CCR Dust Control Plan (the Plan) for SMECI. The Plan is intended to satisfy the air criteria requirements of the coal combustion residual management regulations promulgated in 40 CFR Part 257.80.

This Plan requires SMECI to adopt measures that will effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units, CCR piles, roads, and other CCR management activities.

## 1.1 DUST CONTROL PLAN REQUIREMENTS AND DEFINITIONS

The coal combustion residual regulations promulgated in 40 CFR Part 257 require the preparation, certification and implementation of Dust Control Plans for all regulated CCR units. The requirement to prepare and implement this Plan is applicable to owners and operators of CCR units covered under the rule, including:

- New and existing landfills;
- New and existing surface impoundments;
- CCR units located off-site of the electric utilities' or independent power producers' facilities that receive CCR for disposal; and
- Certain inactive CCR surface impoundments if the CCR unit still contains CCR and liquids.

The Plan contains specific terms that are defined as follows in 40 CFR 257.2, Definitions and associated Federal Registers as noted:

- **Coal combustion residuals (CCR)** - means fly ash, bottom ash, boiler slag and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers.<sup>1</sup>
- **CCR fugitive dust** - means solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than a stack or chimney.
- **CCR landfill** - means an area of land or an excavation that receives CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface

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<sup>1</sup> A description of the types of CCR can be found in the proposed rule (see 75 FR 35137).

coal mine, or a cave. For purposes of this subpart, a CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, and any practice that does not meet the definition of a beneficial use of CCR.

- **CCR pile or pile** - means any noncontainerized accumulation of solid, non-flowing CCR that is placed on the land. CCR that is beneficially used offsite is not a CCR pile.
- **CCR surface impoundment** - means a natural topographic depression, manmade excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR.
- **Facility** - means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, disposing, or otherwise conducting solid waste management of CCR. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).
- **Qualified professional engineer** - means an individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to make the specific technical certifications required under this subpart. Professional engineers making these certifications must be currently licensed in the state where the CCR unit(s) is located.

## 1.2

### *MANAGEMENT OF THE PLAN*

SMECI will periodically assess the effectiveness of this Plan through the following processes and amend the plan as appropriate:

- The plant will review the visual observation records of the affected CCR units. These visual observation records may indicate cause for additional or modified dust control measures.
- Physical or procedural changes to the CCR handling processes that may affect the effectiveness of this Plan will be identified and addressed following the Plant's "Management of Change" procedure.

A completed, certified copy of the Plan will be generated and placed in the SMECI Operating Record by October 19, 2015. SMECI will amend this Plan in accordance with the requirements of §257.80(b)(6) whenever a change that will substantially affect this written Plan, such as construction and operation of a new CCR unit. SMECI will amend this plan whenever necessary and place a copy of the current updated plan in the Operating Record in accordance with the Recordkeeping requirements of §257.105(g)(1).

An amended Plan will be certified by a qualified professional engineer as in accordance with the requirements of §257.80(b)(7).

### **1.3 REPORTING REQUIREMENTS**

SMECI will prepare an annual CCR fugitive dust control report that includes the following information:

- Description of the actions taken by SMECI during the reporting year to control fugitive dust;
- A record of all citizen complaints received during the calendar year; and
- A summary of any corrective measures taken in response to received citizen complaints.

SMECI will complete the initial annual report no later than 14 months after placing the initial Fugitive Dust Control Plan in the operating records. The initial Fugitive Dust Control Plan will be placed in the operating record on October 19, 2015. The initial annual report is due on December 19, 2016. An example annual CCR fugitive dust control report is included in Appendix B.

SMECI will log and record citizen complaints of fugitive dust using the log in Appendix C.

### **1.4 NOTIFICATION REQUIREMENTS**

SMECI will notify the State Director as required under §257.106(g)(1) and (2) when the following documents are made available in the Operating Record:

- The initial and subsequent amendments to this Plan; and
- The annual CCR fugitive dust control report.

The chief administrative officer meeting the definition of the Texas State Director is:

Richard A. Hyde, P.E.  
Executive Director, MC 109  
TCEQ  
P.O. Box 13087  
Austin, TX 78711-3087

### **1.5 COMPLIANCE WITH OTHER REGULATORY REQUIREMENTS**

This Plan is designed to comply with the federal CCR dust control requirements found in 40 CFR Part 257.80 and is not intended to incorporate procedures to fully comply with the requirements of any other regulation. The facility does not intend to duplicate or deviate from the requirements for fugitive dust control required under other regulations or permits such as the SMECI Title V and NSR air permits and Texas air quality regulations under 30 TAC Part 1, Chapter 111, Control of Air Pollution from Visible emissions and Particulate Matter.

2.0

**PROFESSIONAL ENGINEER'S CERTIFICATION**

40 CFR Part 257.80(b)(7) of the dust control regulations require that the dust control plan meets the requirements of the rule. This certification is provided below:

*"I hereby certify that I have reviewed the CCR unit management practices for the SMECI plant in Christine, Texas, and being familiar with the provisions of 40 CFR Part 257.80, attest that this Dust Control Plan has been prepared in accordance with good engineering practices."*



Paul D. Despres  
Printed Name of Registered Professional Engineer

Paul D. Despres  
Signature of Registered Professional Engineer

Date: 10/2/2015

83907  
Registration No.

Texas  
State



### 3.0

#### *POTENTIAL SOURCES OF DUST AND CONTROL MEASURES*

SMECI handles CCR in various types of units. An aerial map of the facility is included as Figure 1 in Appendix A. The SMECI Plant Site Map depicting the areas where CCR is managed and dust control measures are implemented:

- Production areas;
- Sludge Pile;
- Ash Water Transport Pond A and Pond B;
- Equalization Pond (also known as the Sludge Disposal Basin); and
- Connecting roadways.

The regulated CCR Unit and the types of CCR material that may be managed in each unit during normal or contingent operations are presented in Table 3-1, CCR Dust Management and Control Measures.

**Table 3-1. CCR Dust Management and Control Measures**

CCR Unit	CCR Material Managed	Management Method	Dust Control Measure
Ash Water Transport Ponds A & B	Fly ash Bottom ash Economizer ash Pyrites	<ul style="list-style-type: none"> <li>• Piping wet material from process through closed conveyances</li> <li>• Store and processing material in an open aqueous pond system with surrounding berm</li> </ul>	<ul style="list-style-type: none"> <li>• Periodic visual inspections for emission of windblown dust, maintenance of liquid cover.</li> <li>• Apply water spray, mist or fog to areas where drying has caused apparent windblown dust</li> <li>• Use moisture or other conditioning agents to areas subject to drying and visible dust emissions.</li> </ul>
Equalization Pond (aka Sludge Disposal Basin)	Flue Gas Desulfurization Sludge Fly ash	<ul style="list-style-type: none"> <li>• Piping wet material from process through closed conveyances</li> <li>• Store and processing material in an open aqueous pond system with surrounding berm</li> </ul>	<ul style="list-style-type: none"> <li>• Periodic visual inspections for emission of windblown dust, maintenance of liquid cover.</li> <li>• Apply water spray, mist or fog to areas where drying has caused apparent windblown dust on pond berms</li> <li>• Physical removal of dry CCR material and placement in wet systems</li> <li>• Use moisture or other conditioning agents to areas subject to drying and visible dust emissions.</li> </ul>
CCR Pile and Other CCR Management & Material Handling	Fly ash Bottom ash Economizer ash Pyrites Flue gas desulfurization sludge	<ul style="list-style-type: none"> <li>• Storage and conveying wet and dry CCR material through closed conveyances and drop points to open CCR storage area</li> <li>• Storage and handling dry CCR material in bins and hoppers</li> <li>• Discharge of wet CCR material into trucks</li> <li>• Transferring wet CCR material into trucks and transporting inside the plant by truck</li> </ul>	<ul style="list-style-type: none"> <li>• Use water trucks to apply water spray, mist or fog to areas where drying has caused apparent windblown dust</li> <li>• Inspect conveyances for leaks of CCR material that results in visible dust emissions</li> <li>• Adjust CCR drop height or shroud as appropriate to minimize windblown dust from conveyor to open pile</li> <li>• Place only wet materials in open trucks for transport throughout the plant</li> <li>• Manual dust suppression along roadways using water or physical removal.</li> </ul>

**Figure 1: SMECI Site Map**  
*Appendix A*

*October 2015*  
*Project No. 0303548*



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community  
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# Environmental Resources Management

FIGURE 1  
 SITE PLAN  
 CCR Dust Control Plan  
 San Miguel Electric Cooperative, Inc. Facility  
 Atascosa County, Texas



DESIGN: PD/CJ	DRAWN: EFC	CHKD.: .
DATE: 9/1/2015	SCALE: AS SHOWN	REVISION: 0
W.O.NO.: K:\GIS\SMEC\Christine_TX\MXD\Fig1_SitePlan.mxd		

**Example Annual CCR Fugitive Dust Control Report**  
*Appendix B*

*October 2015*  
*Project No. 0303548*

**Environmental Resources Management**  
206 East 9<sup>th</sup> Street, Suite 1700  
Austin, Texas 78701  
(512) 459-4700

# Annual CCR Fugitive Dust Control Report

SMECI

Christine, TX

Reporting Year: \_\_\_\_\_

CCR Unit	CCR Material Managed	Dust Control Methods Used During Reporting Year	Date Dust Observed	Results and Corrective Measures
Ash Water Transport Ponds A & B	Fly ash Bottom ash Economizer ash Pyrites	<ul style="list-style-type: none"> <li>• Periodic visual inspections for emission of windblown dust, maintenance of liquid cover.</li> <li>• Apply water spray, mist or fog to areas where drying has caused apparent windblown dust</li> <li>• Use moisture or other conditioning agents to areas subject to drying and visible dust emissions.</li> </ul>		
Equalization Pond (aka Sludge Disposal Basin)	Flue Gas Desulfurization Sludge Fly ash	<ul style="list-style-type: none"> <li>• Periodic visual inspections for emission of windblown dust, maintenance of liquid cover.</li> <li>• Apply water spray, mist or fog to areas where drying has caused apparent windblown dust on pond berms</li> <li>• Physical removal of dry CCR material and placement in wet systems</li> <li>• Use moisture or other conditioning agents to areas subject to drying and visible dust emissions.</li> </ul>		
Other CCR Management & Material Handling	Fly ash Bottom ash Economizer ash Pyrites	<ul style="list-style-type: none"> <li>• Use water trucks to apply water spray, mist or fog to areas where drying has caused apparent windblown dust</li> <li>• Inspect conveyances for leaks of CCR material that results in visible dust emissions</li> <li>• Place only wet materials in open trucks for transport throughout the plant</li> <li>• Manual dust suppression along roadways using water or physical removal.</li> </ul>		

**Example Citizen Complaint Log**  
*Appendix C*

*October 2015*  
*Project No. 0303548*

**Environmental Resources Management**  
206 East 9<sup>th</sup> Street, Suite 1700  
Austin, Texas 78701  
(512) 459-4700

Citizen Complaint Log - Fugitive Dust Emissions

SMECI

Christine, TX

Date & Time Complaint Received	
Person Receiving Complaint	
Method Complaint Registered or Received	
Description of Complaint	
Area of Site Originating Complaint (if applicable)	
Corrective Action Description and Timetable (if applicable)	
Follow-Up Actions (if applicable)	