



**Bullock, Bennett & Associates, LLC**

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## ANNUAL CCR FUGITIVE DUST CONTROL REPORT

SAN MIGUEL ELECTRIC COOPERATIVE, INC.

October 12, 2023

Prepared for:

**San Miguel Electric Cooperative, Inc.**  
6200 FM 3387  
Christine, Atascosa County, Texas 78012

Prepared by:

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## 1.0 INTRODUCTION

Bullock, Bennett, and Associates, LLC (BBA) was retained by the San Miguel Electric Cooperative, Inc. (SMECI) to complete an on-site inspection and prepare the Annual Coal Combustion Residuals (CCR) Fugitive Dust Control Report. The SMECI lignite-fired 440-megawatt (MW) power plant and associated mining facilities are located approximately six miles south of Christine, in Atascosa County in South Texas. Properties surrounding the facility are primarily comprised of open rural agricultural farm and ranch land mixed with oil and gas production facilities.

This Annual CCR Fugitive Dust Control Report has been prepared in general accordance with requirements set forth under the United States Environmental Protection Agency (USEPA) CCR Rule, 40 Code of Federal Regulations (CFR) §257.80. The federal CCR rules have been adopted by the Texas Commission on Environmental Quality (TCEQ) under 30 Texas Administrative Code (TAC) Chapter 352. The purpose of this inspection report is to summarize measures implemented by SMECI to control CCR fugitive dust, provide a record of citizen complaints addressing fugitive dust (if any) and to review past corrective measures associated with control of fugitive dust.

BBA performed the inspection on August 25, 2023. During the inspection SMECI personnel were available to provide assistance with BBA's questions.

This Annual CCR Fugitive Dust Control Report covers the October 2, 2022 to October 2, 2023 operating and reporting period as required under 40 CFR §257.80(c).

## 2.0 CCR FUGITIVE DUST CONTROL REQUIREMENTS

The CCR regulations set forth in 40 CFR §257.80(c) require the owners and operators of CCR units to provide an Annual CCR Fugitive Dust Control Report that includes, at a minimum, the following information for the reporting year:

- Descriptions of actions and control measures used to control fugitive dust;
- A record of all citizen complaints received during the calendar year; and,
- A summary of all corrective measures taken.

In addition, owners and operators must comply with the following:

- Recordkeeping requirements as set forth in 40 CFR §257.105(g);
- Notification Requirements as forth in 40 CFR §106(g); and
- Publicly accessible internet site requirements as set forth in 40 CRF §257.107(g).

A summary of the CCR Fugitive Dust Control Plan requirements in 40 CFR §257.80 is as follows:

### §257.80 Air Criteria

- *(a) The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must adopt measures that will effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from*

*CCR units, roads, and other CCR management and material handling activities.*

- (b) *CCR fugitive dust control plan. The owner or operator of the CCR unit must prepare and operate in accordance with a CCR fugitive dust plan as specified in paragraphs (b)(1) through (7) of this section. This requirement applies in addition to, not in place of, any applicable standards under the Occupational Safety and Health Act.*

*(1) The CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility. The owner or operator must select, and include in the CCR fugitive dust control plan, the CCR fugitive dust control measures that are most appropriate for site conditions, along with an explanation of how the measures selected are applicable and appropriate for site conditions. Examples of control measures that may be appropriate include: Locating CCR inside an enclosure or partial enclosure; operating a water spray or fogging system; reducing fall distances at material drop points; using wind barriers, compaction, or vegetative covers; establishing and enforcing reduced vehicle speed limits; paving and sweeping roads; covering trucks transporting CCR; reducing or halting operations during high wind events; or applying a daily cover.*

*(2) If the owner or operator operates a CCR landfill or any lateral expansion of a CCR landfill, the CCR fugitive dust control plan must include procedures to emplace CCR as conditioned CCR. Conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust suppression agent.*

*(3) The CCR fugitive dust control plan must include procedures to log citizen complaints received by the owner or operator involving CCR fugitive dust events at the facility.*

*(4) The CCR fugitive dust control plan must include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan.*

*(5) The owner or operator of a CCR unit must prepare an initial CCR fugitive dust control plan for the facility no later than October 19,*

*2015, or by initial receipt of CCR in any CCR unit at the facility if the owner or operator becomes subject to this subpart after October 19, 2015. The owner or operator has completed the initial CCR fugitive dust control plan when the plan has been placed in the facility's operating record as required by §257.105(g)(1).*

- (6) Amendment of the plan. The owner or operator of a CCR unit subject to the requirements of this section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by §257.105(g)(1). The owner or operator must amend the written plan whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit.*
- (7) The owner or operator must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority that the initial CCR fugitive dust control plan, or any subsequent amendment of it, meets the requirements of the section.*

*(c) Annual CCR fugitive dust control report. The owner or operator of a CCR unit 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 annual report 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. For purposes of this paragraph (c), the owner or operator has completed the annual CCR fugitive dust control report when the plan has been placed in the facility's operating record as required by §257.105(g)(2).*

*(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in §257.105(g), the notification requirements specified in §257.106(g), and the internet requirements specified in §257.107(g)*

The annual CCR Fugitive Dust Control plan must be documented pursuant to the reporting requirements of 40 CFR §257.80(d):

- 40 CFR §257.80(d) *The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in §257.106(g), and the internet requirements specified in §257.107(g).*

### **3.0 POTENTIAL CCR FUGITIVE DUST SOURCES**

SMECI operates various types of CCR producing units throughout the facility. Figure 1 depicts the potential CCR fugitive dust sources. The following potential CCR fugitive dust sources were inspected:

CCR Units:

- Ash Ponds A and B;
- South Equalization Basin; and
- Ash Pile.

Other CCR Management and Handling Areas:

- Fly Ash Silos
- Ash Dewatering Bins; and,
- Connecting roadways.

Note: The Former East Equalization Pond was removed from service and capped in early 2021, and no longer serves as a potential CCR fugitive dust source.

### **4.0 CCR FUGITIVE DUST CONTROL MEASURES**

The on-site visual inspection of the CCR units was performed by a BBA licensed professional engineer on August 25, 2023. Table 1 summarizes the visual observations made during inspection of areas with potential for CCR fugitive emissions, type of CCR material in the area, management methods, and control measures to reduce CCR fugitive dust.

Table 1  
CCR Fugitive Dust Management and Control Measures

CCR Areas	CRR Managed Material	Management Method	Dust Control Measures
Ash Ponds A and B	<ul style="list-style-type: none"> <li>• Fly Ash</li> <li>• Bottom Ash</li> <li>• Economizer Ash</li> <li>• Pyrites</li> </ul>	<ul style="list-style-type: none"> <li>• Wet CCR is piped from processes through enclosed conveyances to the Ash Ponds. Airborne CCR is unlikely due to the wet nature of the CCR.</li> <li>• Accumulated CCR that settles out of transport water is managed in the pond system.</li> </ul>	<ul style="list-style-type: none"> <li>• SMECI personnel perform daily inspections of the CCR Ash Ponds A and B for fugitive dust emissions and to ensure a liquid cover is maintained within the ponds.</li> <li>• Water trucks are used to spray Ash Ponds A and B on an as-needed basis to prevent windblown fugitive emissions.</li> <li>• At the time of inspection, Ash Ponds A and B were maintained with a liquid cover, there were no observations of fugitive dust during the annual inspection.</li> </ul>
South Equalization Basin	<ul style="list-style-type: none"> <li>• Flue Gas Desulfurization (FGD) Sludge</li> <li>• Fly Ash</li> </ul>	<ul style="list-style-type: none"> <li>• Wet CCR is piped from processes through enclosed conveyances to the South Equalization Basin. Airborne CCR is unlikely due to the wet conditions of the CCR.</li> <li>• Accumulated CCR that settles out of FGD effluent will be managed in the pond system.</li> </ul>	<ul style="list-style-type: none"> <li>• SMECI personnel perform daily inspections of the South Equalization Basin for fugitive dust emissions and to ensure a liquid cover is maintained within the basin.</li> <li>• Water trucks are used to spray the basin on an as-needed basis to prevent windblown fugitive emissions.</li> <li>• At the time of inspection, the South Equalization Basin was being maintained with a liquid cover, there were no observations of fugitive dust during the annual inspection.</li> </ul>
Ash Pile	<ul style="list-style-type: none"> <li>• Flue Gas Desulfurization (FGD) Sludge</li> <li>• Fly Ash</li> </ul>	<ul style="list-style-type: none"> <li>• CCR is dampened and transferred through enclosed conveyors and stockpiled at the Ash Pile for future handling and off-site disposal.</li> </ul>	<ul style="list-style-type: none"> <li>• SMECI personnel perform daily visual inspections of the Ash Pile and conveyor system for fugitive dust emissions.</li> <li>• Ash conveyors are equipped with a wet suppression spray system that keeps the CCR moist while transported and stockpiled.</li> <li>• CCR is normally removed from the Ash Pile on a daily basis to manage stockpiled ash material and limit windblown dust.</li> <li>• A partially enclosed conveyor system is used to reduce windblown dust.</li> <li>• A front-end loader is used to keep the ash in a uniform stockpile.</li> <li>• Water trucks are used to spray the Ash Pile on an as-needed basis to prevent windblown fugitive emissions.</li> </ul>

			<ul style="list-style-type: none"> <li>The repairs made to the south steel containment wall in October of 2018 appears to be operating as designed, and maintenance repairs are being conducted on a west-side steel wall section.</li> <li>There were no observations of fugitive dust during the annual inspection.</li> </ul>
Other Management Areas (Fly Ash Silos & Ash Dewatering Bins)	<ul style="list-style-type: none"> <li>Fly Ash</li> <li>Bottom Ash</li> <li>Economizer Ash</li> <li>Pyrites</li> <li>Flue Gas Desulfurization (FGD) Sludge</li> </ul>	<ul style="list-style-type: none"> <li>Wet methods are used to control CCR while piped through closed conveyances to dewatering bins.</li> <li>Moist CCR is transferred to haul trucks for off-site disposal.</li> <li>Fly Ash is stored in closed silos and transferred in enclosed trucks.</li> </ul>	<ul style="list-style-type: none"> <li>SMECI personnel performed daily visual inspections of the CCR units and CCR handling operations.</li> <li>Water trucks were used to apply water as needed to connecting roadways within the plant area to prevent windblown fugitive dust.</li> <li>Fly Ash is staged in enclosed silos and Ash Dewatering Bins. A portion of the Fly Ash is sold and transported off-site in enclosed trucks to reduce potential for fugitive dust emissions. Ash from the Ash Dewatering Bins is transported in a moist condition to the mine landfill.</li> <li>There were no observations of fugitive dust during the annual inspection.</li> </ul>
Connecting Roadways	<ul style="list-style-type: none"> <li>Fly Ash</li> <li>Bottom Ash</li> <li>Economizer Ash</li> <li>Pyrites</li> <li>Flue Gas Desulfurization (FGD) Sludge</li> </ul>	<ul style="list-style-type: none"> <li>Wet CCR is piped through closed conveyances to dewatering bins and transferred moist into haul trucks for off-site disposal.</li> <li>Fly Ash is stored and handled in closed silos and transferred to enclosed trucks for transport off-site.</li> </ul>	<ul style="list-style-type: none"> <li>SMECI personnel performed daily inspections of the connecting roads and associated CCR Units for visible fugitive dust emissions.</li> <li>Water trucks were used to apply water to connecting roads and surrounding areas on an as-needed basis to prevent fugitive emissions.</li> <li>Low vehicle speeds are maintained on connecting roadways and throughout the plant to minimize windblown dust.</li> <li>There were no observations of fugitive dust during the annual inspection.</li> </ul>



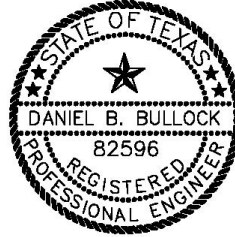
**5.0 CITIZEN COMPLAINTS and CORRECTIVE ACTIONS**

SMECI did not receive citizen complaints with regard to CCR fugitive dust during the 2023 reporting period. No corrective actions were implemented; however, standard maintenance of wall system and dust suppression system is completed routinely.

I, Dan Bullock, certify under penalty of law that the information submitted in this inspection report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the state of Texas. The information submitted, is to the best of my knowledge and belief, true, accurate and complete.



Dan Bullock, PE  
Texas PE No. 82596, Expires: 06/30/2024  
Date: 10/12/2023



10/12/2023

ATTACHMENT

- Figure 1 – Site Map

Plot Date: 09/26/23 - 3:27pm, Plotted by: Admin  
Drawing Path: K:\clients\bbas\San Miguel\23673, Drawing Name: C-ST-PL101.dwg



ASH PILE

FLY ASH SILOS

ASH DEWATERING BINS

ROAD

WATER LEVEL GAUGE

ASH POND A

WATER LEVEL GAUGE

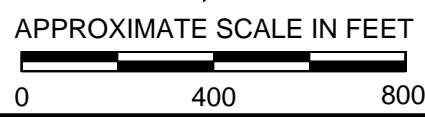
SOUTH EQUALIZATION BASIN

ASH POND B

RAW WATER POND

FORMER EQUALIZATION POND (CAPPED AND VEGETATED)

WITH REMOVAL OF THE FORMER EAST EQUALIZATION POND FROM SERVICE, AND CAPPING, THIS SECTION OF ROAD IS NO LONGER SUBJECT TO POTENTIAL FOR EXPOSURE TO CCR MATERIAL.

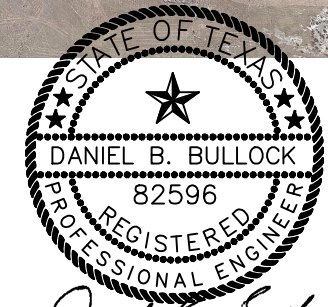


**SOURCES:**

SITE IS USING TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE, NAD83.

AERIAL BACKGROUND PROVIDED BY PLEX-EARTH USING GOOGLE MAPS (TAKEN 3-2022).

NOTE: AERIAL BACKGROUND PHOTO IS MOST RECENT AVAILABLE, BUT IS NOT CURRENT AND DOES NOT REFLECT CURRENT SITE CONDITIONS. PROVIDED FOR GENERAL INFORMATIONAL PURPOSES ONLY.



*Daniel B. Bullock*  
9-26-2023

San Miguel Electric Cooperative Inc.  
Atascosas County, Texas

Figure 1

**SITE MAP - CCR FUGITIVE DUST CONTROL PLAN**

PROJECT: 23673 | BY: RCAD-RR | DATE: SEP 2023 | CHECKED: DBB

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Engineering and Geoscience  
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