ANNUAL INSPECTION REPORT FOR COAL COMBUSTION RESIDUALS (CCR) FUGITIVE DUST CONTROL SAN MIGUEL ELECTRIC COOPERATIVE POWER PLANT

Prepared For:

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1.0 Introduction

Wood Environment & Infrastructure Solutions, Inc. (Wood) was retained to prepare the Annual Coal Combustion Residuals (CCR) Fugitive Dust Control Report for the San Miguel Electric Cooperative Inc. (SMECI) Power Plant, located at 6200 FM 3387, six miles south of Christine, Texas. The plant is surrounded by open grassy pasturelands used primarily for livestock, lignite mines, and oil and gas production facilities. The SMECI Power Plant is a lignite-fired electrical generating plant that utilizes locally mined lignite.

This Annual CCR Fugitive Dust Control Report has been prepared pursuant to the requirements of 40 Code of Federal Regulations (CFR) § 257.80. The purpose of this inspection report is to provide a description of the actions taken to control CCR fugitive dust, provide a record of all citizen complaints concerning fugitive dust, and to provide a summary of any corrective measures taken concerning fugitive dust control.

This is the Annual CCR Fugitive Dust Control Report for the October 2, 2018 to October 2, 2019 reporting period as required by USEPA CCR Rule, 40 CFR § 257.80(c), for the facility's CCR units (the Equalization Pond, Ash Pile, and the Ash Ponds A and B), roads, and other CCR management and material handling activities (Fly Ash Pile Silos and Ash Dewatering Bins).

2.0 Fugitive Dust Control Requirements

The CCR reporting regulations promulgated in 40 CFR § 257.80(c) require the owner or operator of CCR units to provide an Annual CCR Fugitive Dust Control Report that addresses the actions taken by the facility during the reporting year to control fugitive dust at the facility, records all citizen complaints received during the reporting period, and summarizes all corrective measures taken at the facility in response to citizen complaints.

The owner or operator of the CCR units must comply with:

- Recordkeeping requirements as specified in 40 CFR § 257.105(g),
- Notification requirements as specified in 40 CFR § 257.106(g), and
- Internet requirements placing the CCR Fugitive Dust Control Report on the owner or operator's website as specified in 40 CFR § 257.107(g).

The CCR Fugitive Dust Control requirements are subject to the regulation set forth in 40 CFR § 257.80. The components of the fugitive dust control plan are, as follows:

- 40 CFR § 257.80(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.*

- 40 CFR § 257.80(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.

The annual CCR Fugitive Dust Control documents actions, records, and corrective measures pursuant to the reporting requirements of 40 CFR § 257.80(c):

- *40 CFR § 257.80(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).

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 CCR Fugitive Dust - Potential Sources

SMECI has several potential sources of CCR Fugitive Dust. The Site Map (**Figure 1**) indicates the location of the CCR units, roads, and areas that handle CCR. The areas where CCR is managed and dust control measures are utilized are as follows:

- Ash Pile,
- Ash Ponds A and B,
- Equalization Pond,
- CCR management and handling areas – Ash Dewatering Bins and Fly Ash Silos, and
- Roadways connecting the CCR units and roadways within the San Miguel Power Plant.

4.0 CCR Fugitive Dust – Control Measures

The visual inspections of the CCR Units for the 2018 Annual Fugitive Dust Control Report were performed under the direction of a qualified professional engineer, on November 21, 2019. Table 1 summarizes the CCR fugitive dust management and control measures implemented at the facility CCR units, roads, and ash management and handling areas during the period addressed by this Annual Report.

Table 1
Summary of CCR Fugitive Dust Management and Control Measures

CCR Unit or Management Area	Management Methods	Dust Control Measures
Ash Pile	• Flue Gas Desulfurization (FGD) Sludge • Fly Ash	• SMECI personnel conducted daily visual inspections of the CCR Ash Pile and conveyor systems to confirm that windblown dust was managed and controlled. • SMECI typically removes CCR from the Ash Pile on a daily basis to limit windblown dust and to manage stockpiled ash material.

CCR Unit or Management Area	Management Methods	Dust Control Measures
		• The conveyor system is partially covered to reduce expose to weather events and to reduce windblown dust. • The conveyor system and Ash Pile containment structure are equipped with continuous water sprayers to wet the CCR as it is transported to the Ash Pile and to maintain moisture in the ash material during the periods that the CCR is stockpiled. • SMECI uses a loader to pick up spilled ash material and place it in the stockpile. • SMECI uses water trucks to spray down the Ash Pile area on an as needed basis to manage windblown dust. • Repairs were conducted on the steel southern wall and on the concrete eastern wall of the Ash Pile containment structure during the October 2018 outage. These repairs appeared to be operating as designed during the 2019 Annual Inspection.
Ash Ponds A and B	• Fly Ash • Bottom Ash • Economizer Ash • Pyrites	• SMECI personnel conducted daily visual inspections of the CCR Ash Pond B to confirm that windblown dust was managed and controlled and that the liquid cover was maintained at the pond. • SMECI, starting in January of 2019, isolated Ash Pond A from Ash Pond B and then dewatered Ash Pond A. Following the dewatering process the wet ash material removal in the western portion of Ash Pond A began. The ash removal has continued throughout 2019. The wet ash is hauled to the Ash Pile site. A water truck is used on an as needed basis to control dust along the haul road. • SMECI personnel responsible for the daily inspections of the Ash Pond CCR units reported that there were no visible observations of windblown fugitive dust from the Ash Ponds during the 2019 reporting period.
Equalization Pond	• Flue Gas Desulfurization (FGD) Sludge • Fly Ash	• SMECI personnel conducted daily visual inspections of the CCR Equalization Pond unit to confirm that windblown dust was managed and controlled and that the liquid cover was maintained at the ponds. • Additional CCR material was stockpiled within the northern portion of the Equalization pond. in 2018. This ash material was not removed at the time of the 2019 Annual Inspection and is not submerged in water. • SMECI personnel responsible for the daily inspections of the Equalization Pond CCR unit reported that there were no visible observations of windblown fugitive dust from the pond during the 2019 reporting period. • Dust prevention measures that would be utilized at the Equalization Pond as needed would involve the use of a water truck on the perimeter berm road and the installation of a sprinkler system to wet the material within the pond. However, it is noted that the dredged material forms a solid crust that is not subject to wind erosion and, therefore, has not been observed to emit visible windblown fugitive dust.

CCR Unit or Management Area	Management Methods	Dust Control Measures
Other Management Areas – Ash Dewatering Bins and Fly Ash Silos	• Fly Ash • Bottom Ash • Economizer Ash • Pyrites • Flue Gas Desulfurization (FGD) Sludge	• SMECI personnel conducted daily visual inspections of the CCR units, other CCR management and handling activities, and the connecting roadways within the power plant area for visible fugitive dust emissions. • SMECI utilized water trucks equipped with sprayers as needed to wet roadways and other areas within the area of the power plant to manage and control windblown fugitive dust. • Fly ash is contained in enclosed silos and within the enclosed Ash Dewatering Bins. Some Fly Ash is sold and transported offsite in enclosed trucks to reduce fugitive dust emissions. Ash in the Ash Dewatering Bins is transported damp to the mine landfill to reduce windblown fugitive ash emissions.
Roadways	• Fly Ash • Bottom Ash • Economizer Ash • Pyrites • Flue Gas Desulfurization (FGD) Sludge	• SMECI personnel conducted daily visual inspections of the CCR units, other CCR management and handling activities, and the connecting roadways within the power plant area for visible fugitive dust emissions. • Ash transport dump trucks and all vehicles at the plant drive at low speeds to minimize the amount of dust coming off tires during the transportation process. • SMECI utilized water trucks equipped with sprayers as needed to wet roadways and other areas within the power plant area to manage and control windblown fugitive dust.

5.0 Citizen Complaints

An historical complaint was received on August 3, 2018. The complaint was received as follows:

- Failure to operate the Ash Transport Ponds in accordance with the provisions of the fugitive dust plan requiring it to "[a]pply water spray, mist or fog to areas where drying has caused apparent windblown dust" and to "[u]se moisture or other conditioning agents to areas subject to drying and visible dust emission."

- Failure to operate the Equalization Pond in accordance with the provisions of the fugitive dust plan requiring it to "[a]pply water spray, mist or fog to areas where drying has caused apparent windblown dust on pond berms" and "[u]se moisture or other conditioning agents to areas subject to drying and visible dust emissions."

- Failure to operate the Ash Pile in accordance with the provisions of the fugitive dust plan requiring it to "[u]se water trucks to apply water spray, mist or fog to areas where drying has caused apparent windblown dust," "[p]lace only wet materials in open trucks for transport throughout the plant," and use "[m]anual dust suppression along roadways using water or physical removal."

The complaint was general and failed to provide any specificity as to the event or date of an alleged incident. The dust control measures referenced in Table 3-1 of SMECI's CCR Fugitive Dust

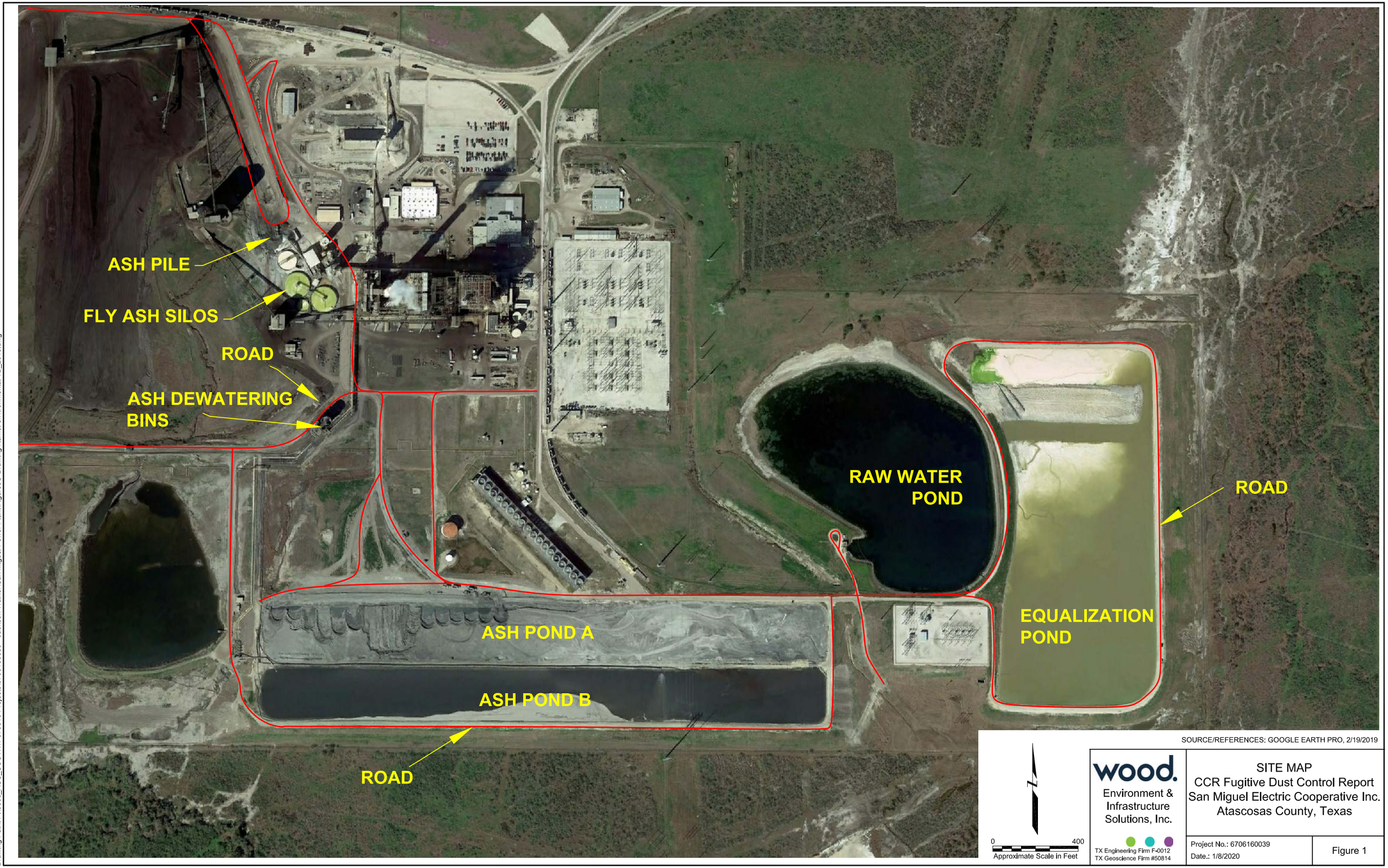
Control Plan were implemented and SMECI is not aware of any failures to conduct such measures during the period that is the subject of this report.

No citizen complaints were received during the period addressed by this Annual Report.

6.0 Corrective Action and Documentation

No corrective actions were necessary during the period addressed by this Annual Report.

FIGURE



SOURCE/REFERENCES: GOOGLE EARTH PRO, 2/19/2019

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0 400
Approximate Scale in Feet

wood.
Environment & Infrastructure Solutions, Inc.
TX Engineering Firm F-0012
TX Geoscience Firm #50814

SITE MAP
CCR Fugitive Dust Control Report
San Miguel Electric Cooperative Inc.
Atascosas County, Texas

Project No.: 6706160039
Date.: 1/8/2020

Figure 1