

# **SOUTHWESTERN ELECTRIC POWER COMPANY**

## **FLINT CREEK POWER PLANT**



## **FUGITIVE DUST CONTROL PLAN**

Prepared By:

**Southwestern Electric Power Company**  
**Flint Creek Power Plant**  
21797 SWEPCO Plant Road  
Gentry, AR 72734

and

**American Electric Power Service Corporation**  
**Environmental Services**  
1 Riverside Plaza, 17  
Columbus, OH 43215

**September 2015**  
**Initial Plan**

**August 2024**  
**Revision 5**

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**Appendices**

**Appendix A – 40 CFR Part 257.80 Air Criteria (Fed. Reg. April 17, 2015)**

**Appendix B – Flint Creek Power Plant Topographic Site Plan**

**Appendix C – Flint Creek Power Plant Overhead View**

**Appendix D – Plan Modification Documentation**

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## Professional Engineer's Certification

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*By means of this certification, I certify that I have reviewed this CCR Fugitive Dust Control Plan and it meets the requirements of section 40 CFR 257.80(b).*

David Anthony Miller

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Printed Name of Registered Professional Engineer

*David Anthony Miller*

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Signature

15296

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Arkansas

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08.19.2024

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Registration No.

Registration State

Date



## 1.0 INTRODUCTION

This CCR Fugitive Dust Control Plan (Plan) has been prepared pursuant to the air criteria of 40 CFR part 257.80 (see Appendix A). The Plan has been prepared in accordance with good engineering practices to include measures that will effectively minimize CCR from becoming airborne at the facility. The Plan and subsequent amendments will be placed in the operating record and retained in the office of the Flint Creek Plant Environmental Coordinator (PEC). The Plan and subsequent amendments will also be placed on Flint Creek Plant's publicly accessible internet website titled "CCR Rule Compliance Data and Information." The plan will be amended 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. Where appropriate, the Plan incorporates fugitive dust control requirements as contained in the Title V air permit issued by the Arkansas Department of Environmental Quality (ADEQ).

There is one CCR surface impoundment, and one CCR landfill, located at Flint Creek Power Plant that are subject to the Plan. The surface impoundment is the primary bottom ash pond. The Plant completed retrofit activities in 2023. During this project, CCR material was removed from the Bottom Ash Pond. The Flint Creek Landfill (Landfill) primarily receives fly ash, DFGD byproduct, and bottom ash. However, the ADEQ landfill permit allows for the disposal of other solid wastes. The Plan addresses these CCR units and the associated paved and unpaved roadways.

## 2.0 FACILITY DESCRIPTION AND CONTACT INFORMATION

### 2.1 Facility Information

#### Facility Information

Name of Facility: Southwestern Electric Power Company – Flint Creek Power Plant

Street: 21797 SWEPCO Plant Road

City: Gentry State: AR ZIP Code: 72734

County: Benton

Latitude: 36° 15' 22" N Longitude: 94° 31' 36" W

### 2.2 Contact Information

#### Facility Operator:

Name: Southwestern Electric Power Company – Flint Creek Power Plant

Attention: Ricky Weber - Plant Manager

Address: 21797 SWEPCO Plant Road

City, State, Zip Code: Gentry, AR 72734

**Facility Owner:**

Name: Southwestern Electric Power Company  
Arkansas Electric Cooperative Corporation  
Attention: Jill Lukehart– Environmental Manager  
Address: 1 Riverside Plaza, 17  
City, State, Zip Code: Columbus, OH 43215

**Plan Contact:**

Name: Scott Carney – Flint Creek Plant Environmental Coordinator  
Address: 21797 SWEPCO Plant Road  
City, State, Zip Code: Gentry, AR 72734  
Telephone number: 479-444-4726  
Email address: scarney@aep.com

**2.3 Activities at the Facility**

The Flint Creek Power Plant is located in Gentry, Arkansas, and consists of one electric generating unit. Southwestern Electric Power Company and Arkansas Electric Cooperative Corporation co-own Flint Creek’s nominally rated 558-megawatt unit. Southwestern Electric Power Company manages and operates Flint Creek Power Plant. Flint Creek Power Plant provides power to thousands of homes, businesses, schools, and industrial facilities.

Flint Creek Power Plant is equipped with two Electrostatic Precipitators (ESPs) and Dry Flue Gas Desulfurization (DFGD) with Pulse Jet Fabric Filter (PJFF) and Activated Carbon Injection (ACI). The fly ash and DFGD byproduct collected from the ESPs and PJFF is pneumatically conveyed to a fly ash silo or byproduct silo and is then transported by truck to the Landfill or offsite for beneficial reuse. The Landfill is located on Plant property approximately 0.5 miles west of the ESPs.

In December 2022, the dry bottom ash handling system began operation. The dry bottom ash system consists of a fully submerged under-hopper drag conveyor to transfer ash from the steam generator ash hopper into a partially enclosed temporary storage bunker, where it is reclaimed and loaded into trucks for transport to the Landfill for storage and used as a construction material.

## **2.4 Site Maps**

A topographic site plan for the Plant is included in Appendix B and shows the CCR units and surrounding topography. An overhead view of the plant and the associated CCR units is included in Appendix C.

## **3.0 FUGITIVE DUST CONTROL SELECTION**

### **3.1 Paved and Unpaved Roadways**

Trucks are used to transport CCR to the Landfill from the plant site. CCR is hauled from the plant over plant paved and unpaved roadways to the landfill. The roadways are subject to periodic watering as contained in the facility's air permit and its associated watering plan.

The primary appropriate and applicable fugitive dust control measures for roadways are watering and speed controls. Vehicle speed is controlled by posted speed limit signs along the haul route and water is applied to the unpaved roadways on a daily basis and to the Landfill as needed unless evaluation results do not warrant application. If the unpaved roads are covered with snow and/or ice, the ambient temperature is below 40F, if precipitation has occurred that is sufficient to ensure fugitive dust has been minimized, or there is no truck traffic, then implementation of controls will not be necessary. Implementation of any control measures may be suspended if unsafe or hazardous driving conditions would be created by its use.

### **3.2 Landfill**

#### **3.2.1 Overview**

The landfill primarily receives fly ash, DFGD byproduct, and bottom ash from Flint Creek Power Plant. However, many other wastes are permitted for disposal. The byproduct is conditioned with water in pin mixers before transferring the material to trucks. Fly ash is transported in a bottom-dump pneumatic truck equipped with a bottom shroud and water spray system to reduce dust. Water is applied to the landfill as necessary to minimize fugitive dust emissions. The landfill activities are also subject to the Title V permit and its associated watering plan which also specifies the applicable and appropriate fugitive dust control measures for the site to minimize fugitive emissions.

### **3.2.2 Waste Unloading and Placement**

Fly ash and DFGD byproduct is unloaded from trucks in the active fill area of an open Landfill cell, where a bulldozer or similar equipment will subsequently spread and compact the materials. A roller may also be used for compaction. Bottom ash is unloaded from trucks into a storage pile for use in construction or unloaded in the active fill area for subsequent spreading and compaction. The fugitive dust control measures for truck unloading include minimizing drop height, spraying with water, and avoiding activity on high wind days. The control measures for spreading and compacting consist of watering the materials.

### **3.2.3 Wind Erosion**

Generally, Landfill disposal areas can be classified as closed or open. Closed areas have received final or interim cover and vegetation has been established. Therefore, closed areas are not subject to wind erosion. Open areas consist of exposed waste. The open area fugitive dust control measures include: minimizing the amount of open area and pile height; compacting material soon after as it is unloaded; and watering.

### **3.3 Primary Bottom Ash Pond (Pond)**

As of December 2022, bottom ash is no longer sluiced to the primary bottom ash pond. Complete removal of ash from the primary bottom ash pond was completed in August 2023, by dredging and excavation. All removed ash and associated sediment was placed into the onsite landfill. The primary ash pond remains in service as a “wastewater pond” that receives wastes permitted for discharge by the facility’s NPDES wastewater and stormwater permits. Bottom ash is now transferred from the bottom of the boiler by a submerged drag chain, dewatered by an inclined dewatering conveyor, and accumulated in a stockpile in a three-sided concrete bunker. Bottom ash which will not be used or sold is loaded into trucks and transported to the Landfill for disposal. The partial enclosure design of the bottom ash storage bunker minimizes wind erosion. Further enclosures, compaction, and daily cover are not applicable given the size of the area and characteristics of the material.

## **4.0 PLAN ASSESSMENT**

The Plan will be periodically assessed to verify its effectiveness, and if necessary, amended in accordance with Section 7.0 below. The Landfill, Pond, and their associated paved and unpaved roadways are routinely evaluated to determine if the control measures for each CCR unit as described above are being implemented as necessary to minimize fugitive emissions. The PEC will include the control measure



evaluations during the annual assessment of the Plan and determine if additional or modified measures are warranted. No evaluations are necessary if the surface is covered with snow and/or ice or if precipitation has occurred that is sufficient to minimize or eliminate fugitive emissions. Implementation of any control measure may be suspended if unsafe or if hazardous driving conditions would be created by its use.

## **5.0 CITIZEN COMPLAINT LOG**

### ***5.1 Plant Contacts***

Complaints made to the plant will be received by the Plant Environmental Coordinator (Plan Contact).

### ***5.2 Follow-up***

All complaints will be entered into a log by the PEC with details noted such as the nature of the complaint, date, time, and other relevant details. All complaints will be investigated by: inspection of the dust source, checking plant operations at the time of the event, reviewing inspection records, discussion with other plant personnel, reviewing weather data, and/or contacting the person making the complaint to obtain additional information as required.

### ***5.3 Corrective Action and Documentation***

Corrective actions will be taken as needed and documented. If it is determined that the Plan needs to be amended as a result of the investigation, it will be amended accordingly. If possible, the PEC will follow-up with the complainant and/or ADEQ to explain the findings of the complaint investigation and corrective actions. Citizen complaints will be recorded in the annual Report.

## **6.0 ANNUAL REPORT**

The Annual CCR fugitive dust control report (Annual Report) will include the following components: description of actions taken to control CCR fugitive dust; a record of all citizen complaints; and a summary of any corrective measures taken. The initial Annual Report will 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 subsequent reports is one year after the date of completing the previous report. The Annual Report will be deemed complete when the plan has been placed in the facility's operating record as described in Section 8.0.

## **7.0 PLAN AMENDMENTS**

This Plan is a “living” document and will be amended, as necessary, whenever there is a change in condition that would substantially affect the written plan in effect. The Plan will be amended in the case of the construction and operation of a new CCR unit or the closure of an existing unit. Amendments made to the Plan will be documented in Appendix D. The amended Plan will be placed into the facility’s operating record as described in Section 8.0.

## **8.0 RECORDKEEPING, NOTIFICATION and INTERNET REQUIREMENTS**

### ***8.1 Recordkeeping***

The Plan and documentation of all related information will be maintained in a written operating record at the facility for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, record or study. Files may be maintained on a computer or storage system accessible by a computer. One recordkeeping system may be used for the Landfill and Sedimentation Pond if the system identifies each file by the name of each unit. The Plan (and any subsequent amendment of the plan) and the Annual Report will be kept in the facility’s operating record as they become available. Only the most recent Plan must be maintained in the record.

### ***8.2 Notification***

ADEQ will be notified within 30 days of when the Plan (or any subsequent amended Plan) or the Annual Report is placed in the operating record and on the publicly available internet site. This notification will be made before the close of business on the day the notification is required to be completed. “Before the close of business day” means the notification must be postmarked or sent by e-mail by 5:00 PM. If the notification deadline falls on a weekend or federal holiday, the notification is automatically extended to the next business day.

### ***8.3 Internet Site Requirements***

The most recent Plan and annual Report will be placed on the facility’s CCR website titled “CCR Rule Compliance Data and Information” within 30 days of placing them in the operating record.

## Appendix A

## 40 CFR Part 257.80 Operating Criteria

### § 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 control 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).

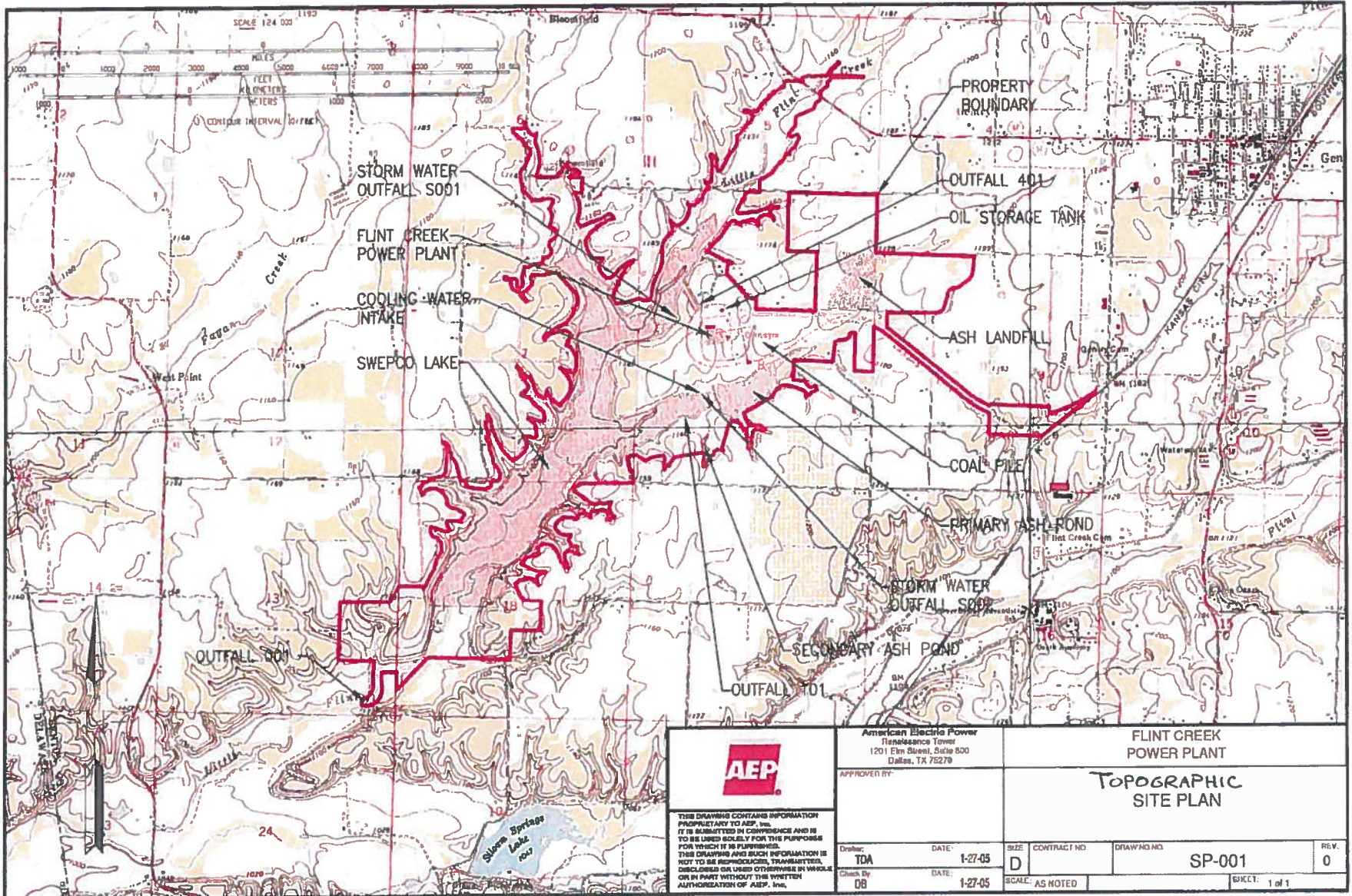
(6) *Amendment of the plan.* The owner or operator of a CCR unit subject to the requirements of this section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(1). The owner or operator must 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 that the initial CCR fugitive dust control plan, or any subsequent amendment of it, meets the requirements of this 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).

## Appendix B



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## Appendix C



# Flint Creek Power Plant

CCR Units (primary ash pond and landfill)

**Legend**

- Flint Creek Power Plant





## Appendix D

