

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

September 2022
Revision 4

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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

Professional Engineer's Certification

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

Printed Name of Registered Professional Engineer



David Anthony Miller

Signature

15296

ARKANSAS

10.07.22

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 has initiated retrofit activities scheduled for completion in 2023. During this project, CCR material is being 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 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: Sara Vestfals - 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: Gregory Wooten – Environmental Engineer
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 reuse. The Landfill is located on Plant property approximately 0.5 miles west of the ESPs.

Bottom ash is produced and wet sluiced to the Primary Bottom Ash Pond (Pond) during unit operations. The bottom ash is routinely reclaimed from the Pond, loaded into trucks and transported to the Landfill for storage and use as a construction material or taken off-site for beneficial reuse. As the Bottom Ash Pond closure activities proceed, the wet sluiced bottom ash system is being transitioned to one that relies on 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 use as a construction material. This transition will be complete in late 2022.

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 every other day, 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 fly ash and byproduct are conditioned with water in pin mixers prior to transferring the material to trucks. 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 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)

Flint Creek Power Plant bottom ash is wet sluiced to the Pond during unit operations. The bottom ash is routinely reclaimed from the pond and placed in temporary stockpiles awaiting use or sale for off-site reuse. Bottom ash which will not be used or sold is loaded into trucks and transported to the Landfill for disposal. Occasionally, ash and sediment is dredged from the pond and placed into a dewatering cell within the footprint of the Pond where it gradually dewateres. As the Bottom Ash Pond closure activities proceed, the wet sluiced bottom ash system is being transitioned to one that relies on 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 use as a construction material. Because bottom ash consists of a large particle size as compared to fly ash, it is less susceptible to wind erosion. However, there may be fugitive emissions from the temporary bottom ash pile, dewatering cell, or truck loading activities. A review of potential control measures concluded that the applicable and appropriate options consist of watering, and minimizing drop height. Water dust suppressant is applied to the temporary stockpile, dewatering cell, temporary storage bunkers and truck loading operations as needed to minimize fugitive emissions as needed. The partial enclosure design of the bottom ash storage bunkers 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 construction and operation of a new CCR unit or 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).

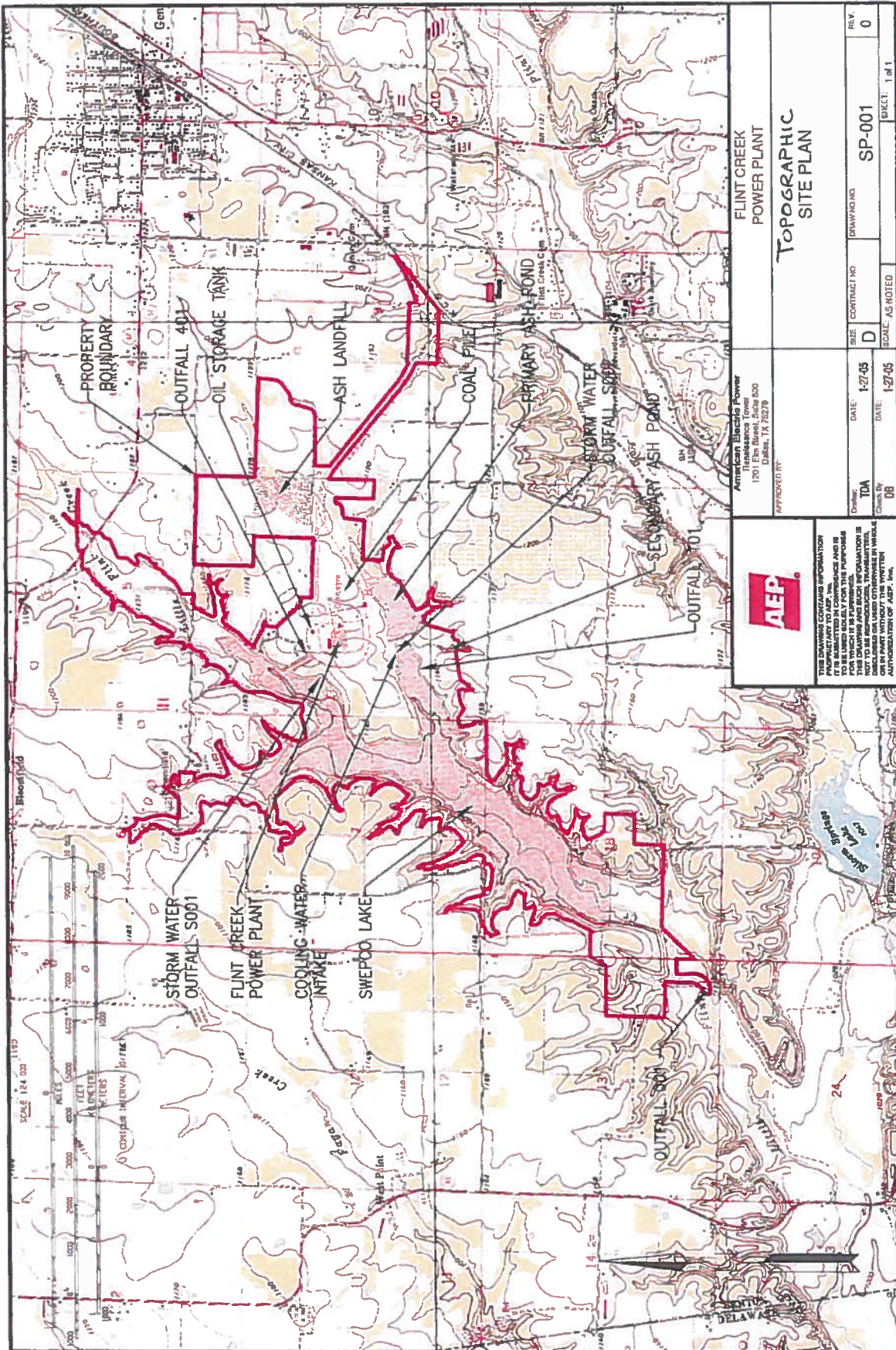
(6) *Amendment of the plan.* The owner or operator of a CCR unit subject to the requirements of this section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(1). The owner or operator must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



FLINT CREEK
POWER PLANT
TOPOGRAPHIC
SITE PLAN

American Electric Power
1201 Elm Street, Suite 800
Dallas, TX 75279
APPROVED BY: [Signature]

DATE: 1-27-05
DRAWN BY: TDA
CHECKED BY: DB

SIZE: D
CONTRACT NO: [Blank]
SCALE: AS NOTED

DRAWING NO: SP-001
REV: 0

SHEET: 1 of 1

AEP

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HV/Pourpoint/Venitron/Environmental topo quads V/Flint Creek/V/Flint Creek Power Plant/fig 07/20/05 1345

Appendix C



Google earth



Appendix D

Record of Plan Revisions		
Revision Number	Date	Revision Description
0	9/18/2015	Initial Plan
1	10/10/2016	Addition of DFGD, PJFF, and ACI
2	9/19/2019	Update Plant Manager
3	4/20/2022	Update AEP Address and Facility Contact
4	9/23/2022	Addition of Bottom Ash Closure Project