# SOUTHWESTERN ELECTRIC POWER COMPANY

# JOHN W. TURK PLANT



# **FUGITIVE DUST CONTROL PLAN**

Prepared By:

Southwestern Electric Power Company
John W. Turk Plant

3711 Highway 355 South Fulton, Arkansas 71838

and

American Electric Power Service Corporation Environmental Services

> 1 Riverside Plaza, Floor 24 Columbus, OH 43215

Revision 0 - September 2015 Revision 5 - October 2025

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# **Appendices**

Appendix A – 40 CFR Part 257.80 Air Criteria (Fed. Reg. May 8, 2024)

Appendix B – Site Facility Map; Landfill Site Plan

Appendix C - Landfill Aerial 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

) avid Anthony Miller

Printed Name of Registered Professional Engineer

Signature

15296 Arkansas 10.03.2025

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 the air criteria and following 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 Turk Plant Environmental Coordinator (PEC). The Plan and subsequent amendments will also be placed on Turk 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 ADEQ air permit issued for the plant.

There is one location that is subject to the Fugitive Dust Control Plan the Turk Plant Landfill (Landfill). The Plan addresses this CCR location 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 – John W. Turk Plant

Street: 3711 Highway 355 South

City: Fulton State: AR ZIP Code: 71838

County: <u>Hempstead</u>

Latitude: <u>33° 38' 45.3"</u> Longitude: <u>93° 49' 45.3"</u>

#### 2.2 Contact Information

# **Facility Operator:**

Name: Southwestern Electric Power Company - John W. Turk Plant

Attention: Jason Agee - Plant Manager

Address: 3711 Highway 355 South

City, State, Zip Code: Fulton, AR 71838

# **Facility Owner:**

Name: Southwestern Electric Power Company
Arkansas Electric Cooperative Corp.
East Texas Electric Cooperative
Oklahoma Municipal Power Authority

Attention: Jill Lukehart, Environmental Manager

Address: 1 Riverside Plaza, Floor 24

City, State, Zip Code: Columbus, OH 43215

#### **Plan Contact:**

Name: <u>Jason Johnson – Turk Plant Environmental Coordinator</u>

Address: <u>3711 Highway 355 South</u> City, State, Zip Code: <u>Fulton, AR 71838</u>

Telephone number: 903-831-1527 Email address: jrjohnson1@aep.com

# 2.3 Activities at the Facility

Southwestern Electric Power Company (SWEPCO), a unit of American Electric Power (AEP), is operating a coal-fired electric power generating facility near Fulton, Arkansas, in Hempstead County. This facility is named the John W. Turk, Jr. Power Plant. The main steam generating unit consists of one ultra-supercritical pulverized coal boiler powering a single steam turbine designed for base load operation with a nominal net power output of 600 megawatts. This boiler burns Powder River Basin (PRB) coal and natural gas.

# 2.4 Site Maps

Appendix B includes a site facility map showing the property boundaries for the Plant and Landfill site plan. Appendix C contains a satellite image of the Landfill area.

# 3.0 FUGITIVE DUST CONTROL SELECTION

# 3.1 Paved and Unpaved Roadways

#### 3.1.1 Overview

Trucks are used to transport CCR to the Landfill from the plant site. The trucks travel over private roadways to the Landfill entrance. From the ash silo, the trucks travel approximately 1.5 miles over Landfill improved roadways to the disposal area. The applicable and adequate fugitive dust control measures were primarily selected in accordance with the measures contained in Arkansas Operating Air Permit for the Landfill roads and for the plant roads. The roadways are also subject to visible emission limits as contained in the air permit.

# 3.1.2 Landfill and Plant Roadways

The primary appropriate and applicable fugitive dust control measures for roadways are watering, tarping, and speed controls. Water trucks are used as needed based upon the daily inspections and other observations to minimize or eliminate fugitive dust. Chemical suppressants or stabilizers may also be used on unpaved roadways depending on specific site conditions. Posted speed limits are 15 mph for paved and unpaved roads. Implementation of control measures will not be necessary for roadways that are covered with snow and/or ice or if sufficient precipitation occurs to minimize or eliminate fugitive dust. 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 receives flue gas desulfurization waste, fly ash and bottom ash from the Turk Plant. These materials contain moisture (conditioned) but water or chemical suppressants are added at the Landfill as necessary to minimize fugitive dust emissions. The Landfill activities are subject to Arkansas Operating Air Permit. This permit specifies the applicable and appropriate fugitive dust control measures for the site to minimize or eliminate fugitive emissions. The permit also includes visible particulate emissions limits as well as monitoring, recordkeeping and reporting requirements. [Note: "conditioned" CCR means the material has sufficient moisture content to prevent wind dispersal but will not result in free liquids].

# 3.2.2 Unloading and Placement

Flyash is unloaded from trucks in the active fill area of an open Landfill cell, where a bulldozer or similar equipment will spread and compact the materials. A roller may also be used for compaction. Bottom ash is unloaded inside the landfill into a temporary pile. Bottom ash may be recycled for beneficial use in some circumstances. Unused bottom ash is spread and disposed in the Landfill. The fugitive dust control measures for truck unloading includes maintaining moisture in the material and taking precautionary measures (minimize drop height). The measures for spreading and compacting include maintaining vehicle speed and watering materials.

#### 3.2.3 Wind Erosion

Generally, Landfill disposal areas can be classified as closed or open. Closed areas will receive final cover. Open areas contain both the active fill area and areas that have been compacted but not yet received final cover. The open area fugitive dust control measures include: precautionary measures such as minimizing the amount of open area and pile height; compacting material as it is unloaded; watering; and application of chemical suppressants. The temporary pile of bottom ash located within the landfill has its fugitive dust emissions minimized by watering and pile height control.

# 3.3 Fly Ash Handling

John W. Turk uses a fly ash handling system. Fly Ash and FGD waste removed from the flue gas is conveyed by means of a vacuum created by mechanical exhausters to one of two fly ash transfer stations. The ash and FGD waste are then pneumatically conveyed to either the recycle ash or waste ash storage silo. The recycle ash and waste ash storage silos are equipped with bin vent filters. Transport air for each vacuum pneumatic conveyance system passes through filter separators before being exhausted to the atmosphere. From the storage silos fly ash/FGD waste is mixed with water then dropped into open top dump trucks.

Bottom ash is collected in a submerged, water-filled trough then conveyed to a storage bunker. From the bunker, the bottom ash is loaded into trucks and hauled to disposal. The applicable and adequate fugitive dust control measures were primarily selected in accordance with the measures contained in the Arkansas Operating Air Permit for material handling.

#### 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 and associated paved and unpaved roadways are inspected on a daily basis. The purpose of the inspections are to determine if the control measures for the CCR unit as described above are being implemented as necessary to minimize or eliminate fugitive emissions. Records of inspections and the control measures implemented as a result of the inspections will be maintained. The PEC will review the inspection records annually to assess the effectiveness of the Plan and determine if additional or modified measures are warranted. No inspection is 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 hazardous driving conditions would be created by its use.

# **5.0 CITIZEN COMPLAINT LOG**

#### **5.1 Plant Contacts**

Generally, complaints made to the plant are by telephone and received by the PEC (Plan Contact). In the case of holiday, weekends, or other times when the PEC may not be onsite, the plant guards or plant general phone number may receive complaint information by telephone that is provided to the PEC at the earliest convenience. Complaints may also be made to ADEQ who in turn will contact the PEC.

# 5.2 Follow-up

All complaints will be entered into a record by the PEC with details noted such as the nature of the complaint, date, time, and other relevant details. All complaints will be followed up which may include: checking plant operations at the time of the event, reviewing inspection records, discussing with other plant personnel, reviewing weather data, collecting samples and contacting the person making the complaint to obtain additional information.

#### 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 corrective actions, it will be amended in accordance with the Plan. If possible, the PEC will follow-up with the complainant and/or ADEQ to explain the findings of the complaint investigation, corrective actions or sampling results. Citizen complaints will be recorded in the annual Report.

#### **6.0 ANNUAL REPORT**

The Annual CCR fugitive dust control report (Annual Report) will be prepared which includes 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. 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 files 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. 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.

[§ 257.105]

#### 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. If the notification deadline falls on a weekend or federal

holiday, the notification is automatically extended to the next business day. [§ 257.106]

# 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. [§ 257.107]

Appendix A

# 40 CFR Part 257.80 Operating Criteria

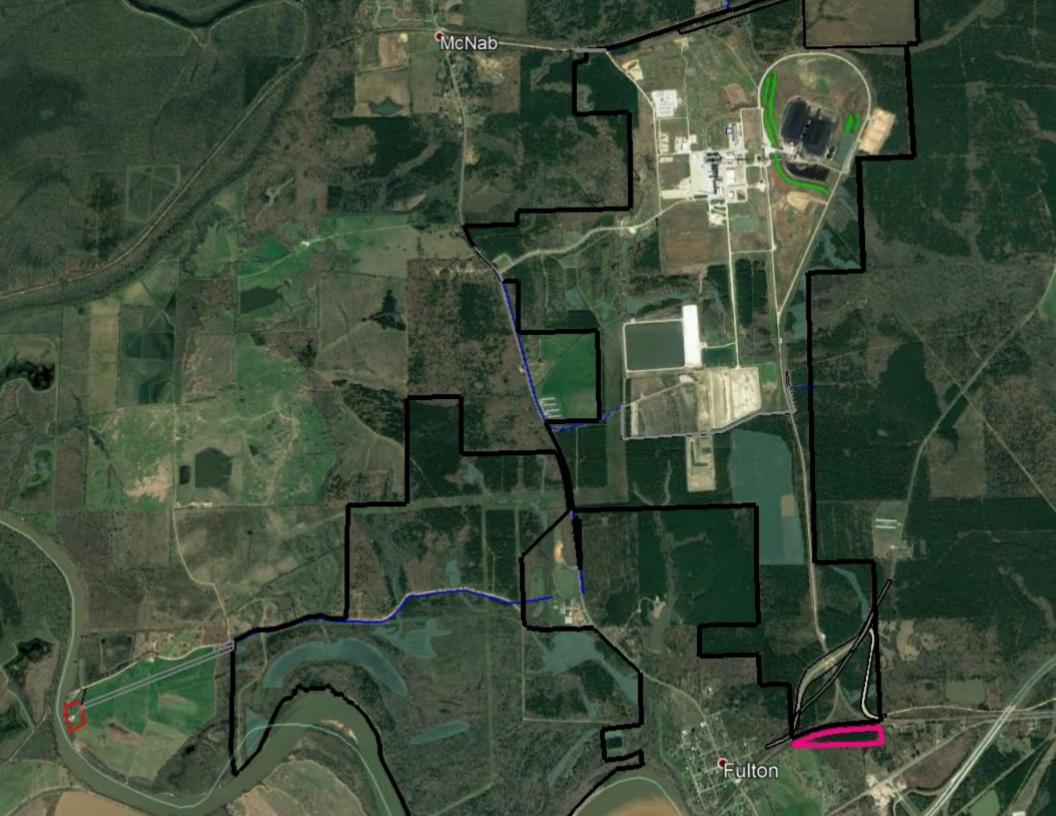
# 257.80 Air criteria.

- (a) The owner or operator 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 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 no later than 30 days 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 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



Appendix C



Appendix D

Record of Plan Revisions				
Revision Number	Date	Revision Description		
0	9/18/2015	Initial Plan		
1	11/11/2016	Revised to reflect new Plant Environmental Coordinator		
2	8/9/2019	Corrected PEC phone number, description of waste, and removed closed areas terminology, added satellite map in place of contour map which included purchased adjacent land in northease corner, replaced Appendix C with crrent map of landfill area.		
3	9/4/2020	New AQS Supervisor and address		
4	1/20/2020	New Facility Owner and address and updated AEP address		
5	10/3/2025	Updated Facility Owner/Operator and addition of fly ash handling operations		