

CPS Energy

# CCR Fugitive Dust Control Plan

Calaveras Power Station  
San Antonio, Texas

October 15, 2015  
Amended November 16, 2022  
Amended August 17, 2023

Project No. 0681818

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Signature Page

# CCR Fugitive Dust Control Plan

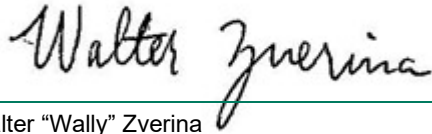
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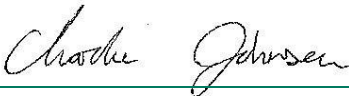
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## 1. INTRODUCTION

CPS Energy owns and operates the Calaveras Power Station which consists of three power plants of which two plants (J.T. Deely and J.K. Spruce) are subject to regulation under Title 40, Code of Federal Regulations, Part 257 (40 CFR §257), Subpart D (a.k.a. the Coal Combustion Residual (CCR) Rule). The Calaveras Power Station is located in unincorporated Bexar County, Texas, approximately 13 miles southeast of San Antonio.

The JT Deely Power Plant ceased operation at the end of December 2018. The JK Spruce Power Plant is still in operation. The Calaveras Power Station includes CCR units associated with both power plants that receive or historically received CCR. Both CPS Energy and Boral Material Technologies (BMT) perform CCR handling tasks at the Calaveras Power Station.

This document serves as the CCR Fugitive Dust Control Plan (FDCP) for CPS Energy. The Plan is intended to satisfy the air criteria requirements of the CCR regulations promulgated in 40 CFR Part 257.80.

This FDCP requires CPS Energy to adopt measures that will effectively minimize CCR from becoming airborne at the Facility, including CCR fugitive dust originating from CCR units, CCR piles, roads, and other CCR management activities. A Facility site map showing the pertinent CCR units, CCR piles, roads, and other CCR management activities is provided in Appendix A.

### 1.1 Plan Requirements and Definitions

The CCR regulations promulgated in the CCR Rule require the preparation, certification and implementation of a FDCP for all regulated CCR units and associated areas (e.g., haul roads and associated CCR management activities). The requirement to prepare and implement this FDCP is applicable to owners and operators of CCR units including:

- New and existing landfills;
- New and existing surface impoundments;
- CCR units located off-site of the electric utilities' or independent power producers' facilities that receive CCR for disposal; and
- Certain inactive CCR surface impoundments if the CCR unit still contains CCR and liquids.

The FDCP contains specific terms that are defined as follows in 40 CFR 257.2, Definitions and associated Federal Registers as noted:

- **Coal combustion residuals (CCR)** – means fly ash, bottom ash, boiler slag and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers.
- **CCR fugitive dust** – means solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than a stack or chimney.
- **CCR landfill** – means an area of land or an excavation that receives CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. For purposes of this subpart, a CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, and any practice that does not meet the definition of a beneficial use of CCR.
- **CCR pile or pile** – means any non-containerized accumulation of solid, non-flowing CCR that is placed on the land. Note: As stated in the CCR Rule Preamble, piles placed on the land and used as

“temporary storage” to manage CCR on-site prior to disposal in a landfill or subsequent beneficial use are considered as a CCR landfill and subject to the requirements of the Rule (unless containerized or contained by some other method of preventing environmental exposure).

- **CCR surface impoundment** – means a natural topographic depression, manmade excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR.
- **Facility** – means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, disposing, or otherwise conducting solid waste management of CCR. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).
- **Qualified professional engineer** – means an individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to make the specific technical certifications required under this subpart. Professional engineers making these certifications must be currently licensed in the state where the CCR unit(s) is located.

## 1.2 Management of the FDCP

CPS Energy will periodically assess the effectiveness of this FDCP through the following procedures and amend the FDCP as appropriate:

- CPS Energy and BMT will log observations of fugitive dust emissions using the Visual Observation Record in Appendix B.
- CPS Energy will review the Visual Observation Records of the affected CCR units. These Visual Observation Records may indicate cause for additional or modified handling processes and/or dust control measures.
- BMT will be responsible for periodically assessing the effectiveness of the FDCP for their operations and recommend amendments to CPS Energy as needed. CPS Energy will also be responsible for periodic assessment of the effective of the BMT operations to comply with this FDCP.

A completed copy of the FDCP, certified by a qualified professional engineer, was originally generated and placed in the Facility Operating Record by October 19, 2015. CPS Energy will amend this FDCP in accordance with the requirements of §257.80(b)(6) whenever a change that will substantially affect this FDCP, such as construction and operation of a new CCR unit. CPS Energy will amend this FDCP whenever necessary and place a copy of the current updated FDCP in the Facility Operating Record and on the CPS Energy CCR Website.

## 1.3 Reporting requirements

CPS Energy will prepare an annual CCR fugitive dust control report that includes the following information:

- Description of the actions taken by CPS Energy during the reporting year to control fugitive dust;
- A record of all citizen complaints received during the calendar year; and
- A summary of any corrective measures taken.

CPS Energy completed and placed the initial annual report no later than 14 months after placing the initial FDCP in the Facility Operating Records. These reports are completed and submitted annually in a *CCR Units – Annual Inspection and Fugitive Dust Control Report*.

CPS Energy will record visual observations of fugitive dust emissions using the record provided in Appendix B and will record citizen complaints of fugitive dust emissions using the log provided in Appendix C.

## 1.4 Notification Requirements

CPS Energy will notify the Texas Commission on Environmental Quality (TCEQ) Industrial Hazardous Waste Permit Section - CCR Program ([ihwper@tceq.texas.gov](mailto:ihwper@tceq.texas.gov)) as required under §257.106(g)(1) and (2) when the following documents are made available in the Facility Operating Record:

- Initial and subsequent amendments to this FDCP; and
- Annual CCR fugitive dust control report.

## 1.5 Internet Posting Requirements

CPS Energy will post the following documents as required under §257.107(g)(1) and (2) within 30 days of placing in the Facility Operating Record:

- Initial and subsequent amendments to this FDCP; and
- Annual CCR fugitive dust control report.

## 1.6 Compliance with other Regulatory Requirements

This FDCP is designed to comply with the federal CCR fugitive dust control requirements found in 40 CFR Part 257.80 and is not intended to incorporate procedures to fully comply with the requirements of any other regulation. The Facility does not intend to duplicate or deviate from the requirements for fugitive dust control required under other regulations or permits such as Title V and NSR air permits and Texas air quality regulations under 30 TAC Part 1, Chapter 111, Control of Air Pollution from Visible Emissions and Particulate Matter.

## 2. PROFESSIONAL ENGINEER'S CERTIFICATION

40 CFR Part 257.80(b)(7) of the CCR regulations require that the Fugitive Dust Control Plan meets the requirements of the CCR Rule. This certification is provided below:

*"I hereby certify that I have reviewed the CCR unit management practices for the CPS Energy Calaveras Power Station in San Antonio, Texas, and being familiar with the provisions of 40 CFR Part 257.80, attest that this Fugitive Dust Control Plan has been prepared in accordance with good engineering practices."*

Seal: Charles Johnson, P.E.  
Printed Name of Registered Professional Engineer



\_\_\_\_\_  
Signature of Registered Professional Engineer

Date: 8/17/2023                      128280                      Texas  
Registration No.                      State

### 3. POTENTIAL SOURCES OF DUST AND CONTROL MEASURES

CPS Energy and their contractor BMT handle CCR in various areas. A site map showing the location of these various areas is included in Appendix A. The site map depicts the following CCR handling areas:

- Fly Ash Landfill (FAL) and Mobile Ash Conditioning System (MACS)
- Sludge Handling Conveyors and Radial Stacker
- JKS1 and JKS2 Concrete Bottom Ash Bins
- Emergency Stackout and Gypsum Storage Unit
- Evaporation Pond
- North and South Bottom Ash Ponds
- Sludge Recycle Holding (SRH) Pond
- Plant Drains Pond
- Paved Roads and Unpaved Roads

The CCR handling areas, types of CCR materials managed, management methods, and dust control measures with explanations on how the measures are applicable and appropriate for site conditions are presented in Table 3-1. 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 drip 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.



**Table 3-1: CCR Fugitive Dust Management and Control Measures**

CCR Handling Areas	CCR Materials Managed	Management Methods	Dust Control Measures
Fly Ash Landfill (FAL) and Associated Mobile Ash Conditioning System (MACS)	Fly Ash Economizer Ash MACS Ash FGD Gypsum Bottom Ash	<ul style="list-style-type: none"> <li>• Fly Ash is transported on-site in covered or enclosed dump trucks, enclosed pneumatic trailers or vacuum trucks. Fly Ash is shipped off-site in enclosed pneumatic trailers or covered dump trucks.</li> <li>• Economizer Ash may be unloaded into the MACS or unloaded into the FAL.</li> <li>• Fly Ash used for the production of MACS Ash will travel from the silos on paved roads and then travel along an unpaved road in covered or enclosed dump trucks or enclosed pneumatic trailers to the FAL. Once the truck arrives at the FAL, the truck will unload Fly Ash into the MACS.</li> <li>• Once MACS Ash has been produced, the MACS Ash will remain stored in the FAL for future sales.</li> <li>• FGD Gypsum is mechanically transported to the FAL by the covered Sludge Handling Conveyors and is discharged from a Radial Stacker located in the southwest corner of the FAL.</li> <li>• Moist Bottom Ash is transported to the FAL along paved and unpaved roads in dump trucks. Drier Bottom Ash is transported to the FAL along paved and unpaved roads in covered dump trucks.</li> <li>• FGD Gypsum and Bottom Ash are stored in the FAL for future sales.</li> <li>• FGD Gypsum and Bottom Ash that are shipped off-site will travel on paved and unpaved roads in covered dump trucks.</li> </ul>	<ul style="list-style-type: none"> <li>• Fly Ash is transported in covered or enclosed trucks, in enclosed pneumatic trailers or vacuum trucks.</li> <li>• Significant spills along roads will be collected and deposited into the FAL.</li> <li>• Paved roads are swept monthly by a motorized street sweeper. Prior to mechanical sweeping, if necessary, any significant accumulations should be collected. To minimize the spread of dust, sweeping activities will not be conducted during high wind events. Collected material from the sweeping activities will be deposited into the FAL.</li> <li>• CPS Energy and BMT document visual observations for emission of windblown dust in the FAL and on the roads quarterly; however, visual observation of windblown dust is conducted more or less continuously while personnel are present. CPS Energy and BMT will use water trucks to apply water spray to areas where drying has caused apparent windblown dust.</li> <li>• The dust collector for the MACS will be in operation during unloading. If the dust collector is not operable, BMT will make necessary repairs prior to unloading.</li> <li>• A stabilized exit is used to control the release of loose CCR materials on truck wheels as the trucks leave the FAL.</li> <li>• The above dust control measures are applicable and appropriate based on the type, moisture content, and storage, transportation, and disposal methods.</li> </ul>

CCR Handling Areas	CCR Materials Managed	Management Methods	Dust Control Measures
Sludge Handling Conveyors and Radial Stacker	FGD Gypsum	<ul style="list-style-type: none"> <li>• FGD Gypsum is mechanically transported to the FAL by the covered Sludge Handling Conveyors and is discharged from a Radial Stacker located in the southwest corner of the FAL.</li> </ul>	<ul style="list-style-type: none"> <li>• CPS Energy will document periodic visual observations of the Conveyors for releases of FGD Gypsum that results in visible dust emissions quarterly; however, visual observation of windblown dust is conducted more or less continuously while personnel are present.</li> <li>• Any significant releases of FGD Gypsum along the Conveyors will be collected and deposited in the FAL.</li> <li>• CPS Energy will adjust CCR drop height or shroud as appropriate to minimize windblown dust from Conveyors and Radial Stacker.</li> <li>• The above dust control measures are applicable and appropriate based on the type, moisture content, and storage, transportation, and disposal methods.</li> </ul>
JKS1 and JKS2 Concrete Bottom Ash Bins	Bottom Ash	<ul style="list-style-type: none"> <li>• Bottom Ash is removed from the boilers by drag chain conveyor and is discharged into a concrete collection bins for temporary storage.</li> <li>• BMT will use a front end loader to remove Bottom Ash from inside the concrete collection bins.</li> <li>• Moist Bottom Ash is transported along paved and unpaved roads in dump trucks and will be stored in the FAL for future sales.</li> </ul>	<ul style="list-style-type: none"> <li>• CPS Energy and BMT will document periodic visual observations for emission of windblown dust on the roads quarterly; however, visual observation of windblown dust is conducted more or less continuously while personnel are present. CPS Energy and BMT will use water trucks to apply water spray to areas where drying has caused apparent windblown dust.</li> <li>• The above dust control measures are applicable and appropriate based on the type, moisture content, and storage, transportation, and disposal methods.</li> </ul>
Emergency Stackout and Gypsum Storage Unit	FGD Gypsum New Gypsum	<ul style="list-style-type: none"> <li>• If Radial Stacker or Sludge Handling Conveyors become inoperable, FGD Gypsum will be discharged at the Emergency Stackout.</li> <li>• BMT or CPS Energy will use a front end loader and dump trucks to move the moist FGD Gypsum from the Emergency Stackout to the FAL along unpaved roads.</li> <li>• New gypsum is stored on a concrete pad within an enclosed/walled area under cover of a roof.</li> </ul>	<ul style="list-style-type: none"> <li>• CPS Energy and BMT will document periodic visual inspections for emission of windblown dust at the Stackout and on the roads quarterly; however visual observation of windblown dust is conducted more or less continuously while personnel are present. CPS Energy and BMT will use water trucks to apply water spray to areas where drying has caused apparent windblown dust.</li> <li>• The above dust control measures are applicable and appropriate based on the type, moisture content, and storage, transportation, and disposal methods.</li> </ul>

CCR Handling Areas	CCR Materials Managed	Management Methods	Dust Control Measures
Evaporation Pond (EP)	Fly Ash, Economizer Ash, FGD Gypsum	<ul style="list-style-type: none"> <li>Evaporation and disposal of CCR Ash Washdown from air pollution control systems and other sources in open pond with surrounding berm – <b>historical operation.</b></li> </ul>	<ul style="list-style-type: none"> <li>Periodic visual inspections for emission of windblown dust.</li> <li>Apply water spray or mist to areas where drying has caused apparent windblown dust.</li> <li>Use moisture or other conditioning agents to areas subject to drying and visible dust emissions.</li> <li>The above dust control measures are applicable and appropriate based on the type, moisture content, and storage, transportation, and disposal methods.</li> </ul>
North and South Bottom Ash Ponds (BAPs)	Bottom Ash	<ul style="list-style-type: none"> <li>Piping wet material from process through closed conveyances – <b>historical operation.</b></li> <li>Store and processing material in an open pond system with surrounding berm – <b>historical operation.</b></li> </ul>	<ul style="list-style-type: none"> <li>Periodic visual inspections for emission of windblown dust.</li> <li>Apply water spray or mist to areas where drying has caused apparent windblown dust.</li> <li>Physical removal of dry CCR material and placement in FAL.</li> <li>Use moisture or other conditioning agents to areas subject to drying and visible dust emissions.</li> <li>The above dust control measures are applicable and appropriate based on the type, moisture content, and storage, transportation, and disposal methods.</li> </ul>
Sludge Recycle Holding (SRH) Pond	FGD Gypsum	<ul style="list-style-type: none"> <li>Piping wet material from process through closed conveyances.</li> <li>Store and processing material in an open pond system with surrounding berm.</li> </ul>	<ul style="list-style-type: none"> <li>Periodic visual inspections for emission of windblown dust, maintenance of liquid cover.</li> <li>Apply water spray or mist to areas where drying has caused apparent windblown dust.</li> <li>Physical removal of dry CCR material and placement in FAL.</li> <li>Use moisture or other conditioning agents to areas subject to drying and visible dust emissions.</li> <li>The above dust control measures are applicable and appropriate based on the type, moisture content, and storage, transportation, and disposal methods.</li> </ul>

CCR Handling Areas	CCR Materials Managed	Management Methods	Dust Control Measures
Plant Drains Pond (PDP)	FGD Gypsum	<ul style="list-style-type: none"> <li>• Piping wet material from process through closed conveyances.</li> <li>• Store and processing material in an open pond system with surrounding berm.</li> </ul>	<ul style="list-style-type: none"> <li>• Periodic visual inspections for emission of windblown dust, maintenance of liquid cover.</li> <li>• Apply water spray or mist to areas where drying has caused apparent windblown dust.</li> <li>• Physical removal of dry CCR material and placement in FAL.</li> <li>• Use moisture or other conditioning agents to areas subject to drying and visible dust emissions.</li> <li>• The above dust control measures are applicable and appropriate based on the type, moisture content, and storage, transportation, and disposal methods.</li> </ul>

## **APPENDIX A      CCR HANDLING AREAS**



Release: 06/20/2022 | Scale: 1:13,000 (Aerial) | Printed at: 8/24/2022

ESRI, HERE, Garmin, © OpenStreetMap contributors, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community | Map data by The ERM Group



0 250 500 1,000  
 Feet

1:15,000  
 1 INCH = 1,250 FEET

**Legend**

- Paved roads swept by street sweeper
- Unpaved roads wetted by water trucks
- - - Sludge Handling Conveyors
- Site Features

**NOTES**

1.

**Figure 1**  
**CCR HANDLING AREAS**  
 CPS Energy  
 Calaveras Power Station  
 San Antonio, Texas



## **APPENDIX B      VISUAL OBSERVATION LOG**

**Visual Observation Record – Fugitive Dust Emissions**

**CPS Energy**

**Calaveras Power Station**

Date and Time Emission Observed	
Person Observing Emission	
Description of Emission	
Area of Site Emission was Observed	
Corrective Actions Description and Timetable (if applicable)	
Follow-Up Actions (if applicable)	



## **APPENDIX C      CITIZEN COMPLAINT LOG**

**Citizen Complaint Log – Fugitive Dust Emissions**

**CPS Energy**

**Calaveras Power Station**

Date and Time Complaint Received	
Person Receiving Complaint	
Method Complaint Registered or Received	
Description of Complaint	
Area of Site Originating Complaint (if applicable)	
Corrective Actions Description and Timetable (if applicable)	
Follow-Up Actions (if applicable)	

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