

# **Fugitive Dust Control Plan**

*for compliance with*

**40 CFR 257: Disposal of Coal Combustion Residuals  
(CCR) from Electric Utilities**

## **CCR UNITS:**

*(located at Winyah Generating Station)*

**Class 3 Landfill Area 1**

**Class 3 Landfill Area 2**

**Ash Pond A**

**Ash Pond B**

**South Ash Pond**

**Slurry Pond 3 & 4**

<b>FUGITIVE DUST CONTROL PLAN REVISION COPY AND CONTROL</b>		
<b>Revision Number</b>	<b>Revision Date</b>	<b>Description</b>
0	09/2015	Original to meet the requirements of 40 CFR 257 Coal Combustion Residuals (CCR) Rulemaking.
1	10/2016	Minor update to Unit 3 & 4 Slurry Pond Source Description.
2	12/2016	Minor update to Unit 3 & 4 Slurry Pond - temporary gypsum stockpiles.
3	10/2018	Removal of Unit 2 Slurry Pond due to its closure. Addition of Class 3 Landfill.
4	07/2024	Updates to Section 2 and PE Certification page. Appendix 1 added.
5	09/2024	Minor revision to Section 3.
<b>Distribution List</b>		
Santee Cooper Air Quality		Electronic Copy
Winyah Generating Station Technical Services Superintendent		Electronic Copy

# Table of Contents

PROFESSIONAL ENGINEER CERTIFICATION.....	3
SECTION 1: INTRODUCTION.....	4
SECTION 2: FUGITIVE DUST SOURCES AND CONTROL MEASURES.....	5
CCR UNIT 1: CLASS 3 LANDFILL AREA 1.....	5
CCR UNIT 2: CLASS 3 LANDFILL AREA 2.....	5
CCR UNIT 3: ASH POND A.....	5
CCR UNIT 4: ASH POND B.....	5
CCR UNIT 5: SOUTH ASH POND.....	5
CCR UNIT 6: SLURRY POND 3 & 4.....	6
GENERAL OPERATIONS.....	6
ADDITIONAL FUGITIVE DUST CONTROLS.....	6
CONDITIONED CCR PROCEDURES.....	6
TABLE 1: LIST OF CCR UNITS.....	7
SECTION 3: CITIZEN COMPLAINT PROCEDURES.....	7
SECTION 4: PERIODIC EFFECTIVENESS ASSESSMENT.....	8
SECTION 5: RECORDKEEPING.....	8
TABLE 2: RECORDKEEPING SUMMARY TABLE.....	8
SECTION 6: CCR RULE REPORTING.....	8
APPENDIX 1: FACILITY MAP IDENTIFYING CCR UNITS.....	10

## PROFESSIONAL ENGINEER CERTIFICATION

In accordance with 40 CFR 257.80(b)(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."

I hereby certify and attest, having examined the facility and being familiar with the provisions of 40 CFR 257, that this Plan has been prepared in accordance with good engineering practices.

Signature of Registered Engineer: *Evan Caudill*

Printed Name of Registered Engineer: Evan Caudill

Registration Number: 42174

State of South Carolina

Date: 9/30/2024

SEAL



## SECTION 1: INTRODUCTION

Coal Combustion Residual (CCR) Units located at Winyah Generating Station (WGS) are subject to 40 CFR 257 Subpart D - Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments. The CCR Units at WGS have been identified as Ash Pond A, Ash Pond B, South Pond, Slurry Pond 3 & 4, Class 3 Landfill Area 1, and Class 3 Landfill Area 2. The CCR Units are described in further detail in Section 2. Per § 257.80 of this regulation, the owner or operator of the CCR Unit(s) are required to adopt measures that effectively minimize CCR from becoming airborne at the facility, and prepare and operate in accordance with a CCR Fugitive Dust Control Plan as specified below:

(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.

(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) 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.

## SECTION 2: FUGITIVE DUST SOURCES AND CONTROL MEASURES

The six (6) CCR Units identified in Table 1 generate fugitive emissions from excavating, screening, wind erosion, temporary stockpiling, hauling, placement, and the compaction of CCR materials. See Appendix 1 for a site map detailing WGS CCR Units.

### CCR UNIT 1: CLASS 3 LANDFILL AREA 1

Class 3 Landfill Area 1 received approval to operate and began receiving waste on November 1, 2018. The landfill is located on the footprint of the closed Unit 2 Slurry Pond. CCR material reclaimed from other on-site CCR ponds as well as other permitted wastes were disposed of in this landfill or were destined for beneficial use on or off-site. Closure of the landfill is currently in progress.

### CCR UNIT 2: CLASS 3 LANDFILL AREA 2

CCR material reclaimed from other on-site CCR Units as well as other permitted wastes are disposed of in this landfill or are destined for beneficial use on or off-site. After placement, the material is spread and compacted according to specific landfill compaction specifications. The process of landfilling material generates fugitive emissions; therefore, excess fugitive emissions may occur during the processes described above during hot, dry weather conditions.

Due to the nature of landfill operations, wet suppression using water is the best management practice for reducing fugitive emissions, as it also aids in material compaction. Source enclosures and the pavement of haul roads in and around the landfill is impractical due to the size of the impacted area. Therefore, landfill operators dispatch dedicated on-site water trucks for wet suppression to minimize fugitive dust during landfill operating hours.

When landfill cells will not be active for extended periods of time, the moisture levels in the cell will be managed using wet suppression. Once active landfill cells are completely filled, final cover is installed, and dust is essentially eliminated.

### CCR UNIT 3: ASH POND A

The majority of Ash Pond A is now Class 3 Landfill Area 2 as shown on the attached facility map (Appendix 1). Only a small portion of Ash Pond A remains. The remaining CCR material in Ash Pond A will be reclaimed, stockpiled, loaded into haul trucks, and transported to the adjoining Class 3 Landfill Area 2.

### CCR UNIT 4: ASH POND B

CCR material is currently being reclaimed from Ash Pond B by screening and piling excavated material into stockpiles. The stockpiled material is then loaded into haul trucks and transported to Class 3 Landfill Area 2 or destined for beneficial use on or off-site.

### CCR UNIT 5: SOUTH ASH POND

CCR material is being reclaimed from the South Ash Pond by screening and piling excavated material into stockpiles. The stockpiled material is then loaded into haul trucks, prior to transport to Class 3 Landfill Area 2 or destined for beneficial use on or off-site.

## CCR UNIT 6: SLURRY POND 3 & 4

CCR material (specifically gypsum) is being reclaimed from Slurry Pond 3 & 4. The CCR material is screened and stockpiled before being loaded into haul trucks and transported to Class 3 Landfill Area 2 or destined for beneficial use on or off-site. A portion of the road has been paved to further minimize fugitive dust emissions.

## GENERAL OPERATIONS

Several fugitive dust control techniques are mentioned in *U.S. EPA AP-42, Fifth Edition, Volume 1, Chapter 13: Miscellaneous Sources* for the processes described above. These include chemical stabilization, reduction of surface wind speed with source enclosures, haul road pavement, and water suppression.

For haul road stabilization and dust suppression, the South Carolina Department of Environmental Services (SCDES) has granted WGS permission to test the use of Resinator™, although trials have not been conducted to evaluate the product's effectiveness. If tested, the effectiveness would be determined qualitatively through visual inspection of the haul roads and the reduced frequency of current dust suppression controls. Chemical stabilization was not considered in the pond areas due to the potential contamination of plant and animal life near and in the pond areas.

Likewise, source enclosure and the pavement of haul roads in and around the ponds are impractical due to the size of the impacted area. The most common, cost effective, and practical method of fugitive dust control for these units is wet suppression using water.

Visual observations are conducted to determine if dust control measures are adequate. If excess dust is visible, WGS personnel will take action to minimize dust by dispatching on-site water trucks for wet suppression to minimize dust as needed.

## ADDITIONAL FUGITIVE DUST CONTROLS

WGS employs additional adjusted work practices to reduce the generation of fugitive dust at all the CCR Units. On high wind days, excavating and screening in the Units is reduced to limit the amount of fugitive dust generated. Vehicle traffic is restricted in the CCR Units to heavy equipment used to excavate, haul, place, and compact CCR material. Adherence to the facility's speed limit of 15 miles per hour is also expected for all heavy equipment operators transporting CCR material.

## CONDITIONED CCR PROCEDURES

Conditioning of CCR applies to CCR Landfills and lateral expansions of CCR Landfills. Water will be applied to the working surface to condition the material and suppress dust, as necessary. The working face will be controlled and minimized in size. During CCR placement, the working surface will be continuously graded to ensure even distribution of water in order to prevent stagnant ponded water.

**TABLE 1: LIST OF CCR UNITS**

<b>CCR Unit #</b>	<b>CCR Unit</b>	<b>Potential Sources of Fugitive Dust</b>	<b>Control Measures</b>	<b>Explanation of Applicable and Appropriate Control Measures</b>
1	Class 3 Landfill Area 1	Placement, Compaction	Final Cover Placement	Final cap is being placed and the landfill is planned to be fully closed by the end of 2024.
2	Class 3 Landfill Area 2	Haul Roads, Placement, Compaction	Water Truck, Vegetative Cover	WGS personnel make daily determinations to dispatch water trucks as necessary to minimize fugitive dust. Dust is controlled in landfilling areas by managing moisture levels on areas which will not be active for extended periods of time.
3	Ash Pond A	Excavating, Wind Erosion, Haul Roads	Water Truck	WGS personnel make daily determinations to dispatch water trucks as necessary to minimize fugitive dust.
4	Ash Pond B	Excavating, Wind Erosion, Haul Roads	Water Truck	WGS personnel make daily determinations to dispatch water trucks as necessary to minimize fugitive dust.
5	South Ash Pond	Haul Roads	Water Truck	WGS personnel make daily determinations to dispatch water trucks as necessary to minimize fugitive dust.
6	Slurry Pond 3 & 4	Excavating, Wind Erosion, Haul Roads, Temporary Stockpiles	Water Truck, Stockpile Tarps	WGS personnel make daily determinations to dispatch water trucks as necessary to minimize fugitive dust.

**SECTION 3: CITIZEN COMPLAINT PROCEDURES**

In accordance with 40 CFR 257.80(b)(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.”

All citizen complaints pertaining to CCR fugitive dust events received by Santee Cooper employees should be directed to Environmental Services to be handled in accordance with the Corporate Environmental Incident Policy. In addition, citizen complaints pertaining to CCR fugitive dust events may also be reported via Santee Cooper’s Anonymous Hotline. This hotline is available to Santee Cooper employees, Santee Cooper customers, and members of the public by calling 888-350-0003. Reporting is available seven (7) days per week, 24 hours per day. The Anonymous Hotline Review Committee will communicate all complaints associated with fugitive dust emissions to the appropriate Santee Cooper personnel. All citizen complaints



received by Santee Cooper involving CCR fugitive dust events at the facility will be summarized in the Annual CCR Fugitive Dust Report and include any corrective measures taken.

#### SECTION 4: PERIODIC EFFECTIVENESS ASSESSMENT

This CCR Fugitive Dust Control Plan will be reviewed annually by the Technical Services Superintendent to assess the effectiveness of these procedures. This evaluation will consist of the following:

- Review of the Fugitive Dust Control Plan to ensure an accurate and up-to-date inventory of fugitive dust sources and control measures.
- Review of any citizen complaints to confirm that response actions were completed in a timely and effective manner

The Technical Services Superintendent is responsible for documenting the findings of the assessment and making the necessary arrangements to amend the plan and obtain a Professional Engineer certification as required.

#### SECTION 5: RECORDKEEPING

Records of citizen complaints are logged through Santee Cooper’s Anonymous Hotline Program as well as the Corporate Environmental Incident Policy.

The periodic effectiveness assessment discussed in Section 4 and the Annual CCR Fugitive Dust Control Report are prepared by the Superintendent of Technical Services. These reports are maintained in the Environmental Management Information System (EMIS). The Annual CCR Fugitive Dust Report is also made available via the facility operating record and the publicly available internet site. See Table 2 for a recordkeeping summary.

**TABLE 2: RECORDKEEPING SUMMARY TABLE**

<b>Record</b>	<b>Location</b>	<b>Regulatory Reference</b>
Citizen Complaints	Anonymous Hotline Records Environmental Incident Records	Not Applicable
CCR Fugitive Dust Control Plan	Operating Record and Public Website	40 CFR 257.105 & 257.107
Annual CCR Fugitive Dust Control Report	Operating Record and Public Website	40 CFR 257.105 & 257.107

#### SECTION 6: CCR RULE REPORTING

In accordance with 40 CFR 257.80(b)(7)(c), “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 Superintendent of Technical Services is responsible for preparing the Annual CCR Fugitive Dust Control Report. This task will be administered through Santee Cooper's Environmental Management Information System (EMIS).

APPENDIX 1: FACILITY MAP IDENTIFYING CCR UNITS