



# CCR Fugitive Dust Control Plan



**Cleco Corporation**

**Dolet Hills Power Station  
Project No. 84881**

**Revision B  
January 2016**



# **CCR Fugitive Dust Control Plan**

prepared for

**Cleco Corporation  
Dolet Hills Power Station  
De Soto Parish, Louisiana**

**Project No. 86617**

**Revision B  
January 2016**

prepared by

**Burns & McDonnell Engineering Company, Inc.  
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Cleco Corporation  
CCR Fugitive Dust Control Plan  
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### Certification

I hereby certify, as a Professional Engineer in the state of Louisiana, that the information in this document was assembled under my direct personal charge. This report is not intended or represented to be suitable for reuse by the Cleco Corporation or others without specific verification or adaptation by the Engineer.

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Date: *1/25/16*

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**LIST OF ABBREVIATIONS**

<b><u>Abbreviation</u></b>	<b><u>Term/Phrase/Name</u></b>
BMcD	Burns & McDonnell
CCR	Coal Combustion Residuals
EPA	Environmental Protection Agency
FGD	Flue Gas Desulfurization
MW	Megawatts

## 1.0 INTRODUCTION

On April 17, 2015, the United States Environmental Protection Agency (EPA) issued the final version of the federal coal combustion residuals rule (CCR Rule) to regulate the disposal of CCR materials generated at coal-fired units. The rule is being administered as part of the Resource Conservation and Recovery Act (RCRA, 42 U.S.C. §6901 et seq.), using the Subtitle D approach.

Cleco Corporation (Cleco) is subject to the CCR Rule and as such has developed a CCR Fugitive Dust Control Plan for all sites handling and disposing of CCR per 40 CFR 257.80. This report provides the Fugitive Dust Control Plan for the Dolet Hills Power Station (Dolet Hills) located in De Soto Parish, Louisiana.

This CCR Fugitive Dust Control Plan is in addition to, not in place of, any other applicable site permits, environmental standards, or work safety practices.

## 2.0 PLAN OBJECTIVES

The Fugitive Dust Control Plan identifies Cleco control measures and practices to minimize and control fugitive dust as required by the CCR Rule. The plan defines the ways in which Cleco personnel and subcontractors will mitigate CCR dust emissions at the plant.

To meet these objectives, the Fugitive Dust Control Plan:

- Identifies potential CCR fugitive dust sources at the facility
- Identifies control measures and practices to control and minimize CCR fugitive emissions.
- Identifies CCR fugitive dust control recordkeeping requirements.
- Identifies CCR fugitive dust control notification requirements.



### 3.0 FUGITIVE DUST SOURCES AND CONTROLS

Cleco operates Dolet Hills Power Station (695 MW) near Mansfield, Louisiana in De Soto Parish, Louisiana. Coal combustion residuals produced at Dolet Hills include fly ash, bottom ash, economizer ash, and scrubber sludge (wet FGD byproduct), which are currently utilized for beneficial use, managed in the onsite impoundments, or disposed of in the onsite landfill. In addition to the controls outlined in this plan, Cleco adheres to controls and Best Management Practices that are required and outlined in site permits and plans. Cleco also holds subcontractors responsible for fugitive dust control emissions.

Table 3-1 lists the fugitive dust sources identified at the facility, briefly describing operations at each potential source.

**Table 3-1: Fugitive Dust Sources**

Source Name	Description
Bottom Ash/Economizer Ash Handling	Sluiced to CCR impoundments
Fly Ash Handling	Handled dry and captured in a silo. Normally mixed with dewatered scrubber sludge to create a conditioned material and containerized in an onsite pile prior to being hauled to the onsite landfill for disposal.
Scrubber Sludge Handling	Sludge removed from thickeners and dewatered with vacuum filters. Normally mixed with fly ash to create a conditioned material and containerized in an onsite pile prior to being hauled to the onsite landfill for disposal.
Haul Roads	Transport roads within the plant site and to the landfill.
Landfill	Truck unloading/material placement/compaction/grading.
CCR Impoundments	Disposal area for wet sluiced bottom/economizer ash.

#### 3.1 Bottom Ash/Economizer Ash Handling

**Identification:** Bottom ash and economizer ash are handled wet and sluiced to CCR impoundments onsite. Since the ash is sluiced in a wet condition via pipeline to site impoundments, it is not likely that CCR fugitive dust would become airborne in the handling of bottom/economizer ash at the site, both at the

generation point of the ash and at the slurry discharge points into the CCR impoundments. Dust control measures taken within the impoundments are discussed in Section 3.6.

### 3.2 Fly Ash Handling

**Identification:** Fly ash is pneumatically transported from the fabric filter's (baghouse) fly ash collection system and stored temporarily in a fly ash silo. A portion of the fly ash is loaded dry into enclosed trucks or enclosed rail cars and transported offsite for beneficial use. Fly ash that is not utilized for beneficial use is mixed in pug mill mixers with scrubber sludge in the sludge treatment building, and then conveyed to a nearby containerized stackout area. The CCR mixture is then hauled to the onsite landfill for disposal. Dust control measures are described in Table 3-2.

**Table 3-2: Fly Ash Handling Control Measures**

<b>Control/Activity</b>	<b>Description</b>
General Silo Controls	Storage silo is equipped with negative pressure vent fans.
Dry Loading	The dry unloading process includes a telescopic loading chute that lowers into transport trucks. The loading chute has a negative pressure unloader fan to minimize the potential for fugitive dust emissions during unloading. Trucks are enclosed.  The dry unloading process also includes an air slide that conveys ash for loading into enclosed rail cars. A negative pressure vent fan is used to minimize the potential for fugitive dust emissions during conveying and rail car loading.
Conveyor to Stackout	The CCR mixture, which has been conditioned with water, is transported to the stackout area via covered conveyor, which minimizes potential for fugitive dust emissions. Water is sprayed in the pug mill mixer and at the radial stackout discharge point for dust control.
Landfill Disposal	The conditioned CCR mixture is hauled to the landfill for disposal. The product is already conditioned since it has been mixed with wet sludge; however, if the product has dried, the product is further wetted with water trucks during placement.

### 3.3 Scrubber Sludge Handling

Sludge from the wet FGD system is removed from the thickeners and substantially dewatered in the sludge treatment building. It is then mixed in pug mill mixers with fly ash to form a CCR product that is conveyed outside of the building to a containerized stackout area. Dust control measures are described in Table 3-3.

**Table 3-3: Scrubber Sludge Control Measures**

<b>Control/Activity</b>	<b>Description</b>
Conveyor to Stackout	The conditioned CCR mixture is transported to the stackout area via covered conveyor, which minimizes potential for fugitive dust emissions. Water is sprayed in the pug mill mixer and at the radial stackout discharge point for dust control
Landfill Disposal	The conditioned CCR mixture is hauled to the landfill for disposal. The product is already conditioned since it has been mixed with wet sludge; however, if the product has dried, the product is further wetted with water trucks during placement.

### 3.4 Haul Roads

Identification: Haul trucks utilize the haul roads within the plant to transport CCR materials to the landfill. Dust control measures are described in Table 3-4.

**Table 3-4: Haul Roads Control Measures**

<b>Control/Activity</b>	<b>Description</b>
Haul Roads	Haul roads to the landfill and impoundments are mostly gravel and are treated with water trucks as needed for fugitive dust control. Haul roads also have low speed limit signs posted which lowers the potential for fugitive dust emissions.

### 3.5 CCR Landfill

Identification: CCR materials are hauled from the sludge stackout area to the CCR landfill for disposal. Dust control measures are described in Table 3-6.

**Table 3-5: CCR Landfill Control Measures**

<b>Control/Activity</b>	<b>Description</b>
Grading/Construction	The conditioned CCR fly ash/scrubber sludge mixture is hauled to the landfill for disposal. The product is already conditioned since it has been mixed with dewatered sludge; however, if the product has dried the product is further wetted with water trucks during placement.

### 3.6 CCR Impoundments

Identification: Bottom/Economizer ash is sluiced to CCR impoundments for disposal. Dust control measures for the ash impoundments are described in Table 3-6.

**Table 3-6: CCR Impoundment Control Measures**

<b>Control/Activity</b>	<b>Description</b>
Wet Sluicing	Material is sluiced in a wet condition and placed in the impoundments. Generally there are no fugitive dust emissions issues near the ash impoundments.

## 4.0 PROCEDURES FOR LOGGING CITIZEN COMPLAINTS

A specific requirement of the CCR fugitive dust control plan requires owners and operators of all CCR units to develop and implement formal procedures to log citizen complaints involving CCR fugitive dust events. These complaints must, then, be included as part of the annual CCR fugitive dust control report. This report must be placed in the operating record and on the owner or operator's publicly accessible internet site.

Cleco will log citizen complaints as received on the log form in Appendix A. Citizens, groups, or agencies who wish to log a complaint may do so at the following link:

<https://fs21.formsite.com/Cleco/ClecoDustConcerns/index.html>

Complaints can also be submitted in writing to the plant address at 963 Power Plant Rd., Mansfield, LA 71052, Attn: Environmental Coordinator.

## **5.0 PERIODIC ASSESSMENT OF THE PLAN**

Cleco may amend the written CCR fugitive dust control plan at any time; however, Cleco 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. The plan and any subsequent amendments must be certified by a qualified professional engineer.

Cleco commits to assessment of the plan on an annual basis, during preparation of the annual CCR fugitive dust control report.

## 6.0 ANNUAL REPORT

Cleco is required to 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. The annual CCR fugitive dust control report is complete when the plan has been placed in the facility's operating record.

**APPENDIX A - CITIZEN COMPLAINT LOG**





CREATE AMAZING.

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