

**Gainesville Regional Utilities
Deerhaven Generating Station**

Coal Combustion Residuals Fugitive Dust Control Annual Report

(October 2022 - September 2023)

Prepared for:

Gainesville Regional Utilities
Gainesville, Florida



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1.0 Introduction

Gainesville Regional Utilities (GRU) operates the Deerhaven Generating Station (facility) located in Gainesville, Florida. The facility has the ability to generate electricity from a variety of sources, including coal. When generated, coal combustion residuals (CCR) were either beneficially used or managed at a CCR surface impoundment system (which includes two ash cells) and/or a CCR landfill. For regulatory purposes, the CCR surface impoundment system and CCR landfill are considered CCR units. The CCRs generated and managed at this facility include bottom ash, fly ash, and flue gas desulfurization byproduct. GRU upgraded the Unit 2 boiler to primarily burn natural gas and with the implementation of these upgrades, the provisions of the CCR rule do not apply to the process water streams generated at the facility.

This fugitive dust control annual report was created per the requirements of 40 CFR 257.80(c). This report includes a list of fugitive dust emission events and the control measures implemented to mitigate the emissions, a list of any citizen complaints received by the facility, and an evaluation of the effectiveness of the current fugitive dust control measures. This annual report covers the period from 1 October 2022 through 30 September 2023 (referred herein to as the report period).

2.0 Fugitive Dust Emission Events and Corrective Measures Implemented

The following facility areas are identified in the CCR Fugitive Dust Control Plan as potential sources of CCR fugitive dust emissions: the CCR landfill, the CCR surface impoundment system, and paved and unpaved roads. Except for the surface impoundment system, all these areas are visually monitored during weekly inspections for dust emissions or for conditions that may contribute to an elevated risk of dust emissions (e.g., uncompacted piles of material in the active area of the CCR landfill). The bottom ash contained in one of the surface impoundment system ponds was inundated with process water for about 11 months of the 12-month reporting period (i.e., Ash Cell #1). The other pond was inundated with process water for the entire report period (i.e., Ash Cell #2). The bottom ash from Ash Cell #1 was excavated and removed for disposal at the landfill during this reporting period. From April 4 to May 9 of 2023, Ash Cell #1 was reported to have a low water level to facilitate this ash removal. However, due to the high moisture content of the dewatered ash, the surface impoundment system was not considered a potential source of fugitive dust during the reporting period. Ash Cell #1, one of the two cells of the surface impoundment system, was closed in May 2023. A draft closure certification report for this portion of the surface impoundment system was submitted to the Florida Department of Environmental Protection on July 14, 2023.

Innovative Technical Solutions engineers visited the surface impoundment system on several occasions during the reporting period (e.g. 12/16/2022, 12/6/2022, 4/6/2023, 4/24/2023, 4/28/2023, 5/3/2023, 6/29/2023, 6/30/2023, 7/7/2023, 7/10/2023, 9/12/2023) and did not observe dust emissions during any of these visits.

The weekly inspection reports from the reporting period were reviewed to compile a list of fugitive dust emissions or emission-related events, identify the cause(s) of the dust emissions (if any), and review the measures implemented to control the dust emissions.

Table 2-1 presents a list of operating conditions that could result in an increased risk of dust emissions, as recorded by GRU personnel during the reporting period, with the date, inspector name, and inspector and supervisor notes for each event. Dust emissions were observed from the access ramp and active disposal area during the weekly inspection on 4/3/2023. Water was sprayed on the access ramp to control these dust emissions.

Eight (8) events associated with the presence of unloaded CCRs piles awaiting spreading and compaction were recorded. However, experience from CCR landfill operation suggests that loose CCR piles present an increased likelihood of dust emissions. On all eight occasions associated with the presence of unloaded CCRs piles, the loose material was spread and compacted within one week of observation.

Table 2-1. Fugitive Dust Emission-Related Events

Date/Time	Inspector	Inspector Notes	Supervisor Notes
12/26/2022	J Caulk	Loose piles need to be spread and compacted	Will start spreading today.
3/20/2023	J Caulk	Loose piles from CDS dumpsters and DHR outage; Need pushed out to make room	Will spread and compact by the end of week
4/3/2023	J Caulk	Access ramps need water sprayed.	Will wet as needed while hauling
		Active area needs water sprayed	Will wet as needed while hauling and spreading
		Loose piles from being hauled over weekend	Will spread starting Tuesday
6/19/2023	T Parker	Several piles of Byproduct need spread	Will spread this week
6/26/2023	J Thompson	Several piles of Byproduct need to be spread	Will spread by end of week - taking advantage of rare training opportunity with new employee
9/4/2023	J Caulk	Loose piles need to be spread	Will spread and compact by end of week
9/11/2023	S Diepersloot	Loose piles need to be spread	Will spread and compact by end of week
9/18/2023	W Williams	Loose piles in landfill need to be spread and packed	Will spread and pack by end of week

3.0 Citizen CCR Dust Complaint

GRU did not receive any citizen complaints related to dust emissions from the facility during the reporting period.

4.0 Assessment of Dust Control Plan Effectiveness

No additional dust control measures were necessary to prevent/mitigate dust emissions at the CCR units beyond the typical measures described in the CCR Fugitive Dust Control Plan. The absence of any reoccurring dust emissions or citizen complaints suggests that the current measures provide effective control of potential dust emissions at the site.