# Gainesville Regional Utilities Deerhaven Generating Station

## **Coal Combustion Residuals Fugitive Dust Control Annual Report**

(October 2017 - September 2018)

#### **Prepared for:**

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#### 1.0 Introduction

Gainesville Regional Utilities (GRU) operates the Deerhaven Generating Station (facility) located in Gainesville, Florida. The facility produces electricity from a variety of sources, including coal. Coal combustion residuals (CCR) generated at the facility are 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 includes bottom ash, fly ash and flue gas desulfurization byproduct.

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 2017 through 30 September 2018.

#### 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., loose piles of material in the active area of the CCR landfill). The bottom ash contained in the surface impoundment system ponds was inundated with process water and was not excavated and removed for disposal at the landfill during the reporting period. Therefore, the surface impoundment system was not considered a potential source of fugitive dust during the reporting period. IWCS engineers visited the surface impoundment system several times during the reporting period (i.e., 12/12/2017, 12/13/2017 12/19/2016, 01/23/2017, 8/28/2018) 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 emission or emission-related events, identify the cause(s) of the dust emissions, and review the measures implemented to control the dust emissions. Visible dust emissions were identified only on two occasions. Table 2-1 presents a list of all visible dust emission events recorded by GRU personnel during the reporting period with the date, time, inspector, and inspector and supervisor notes for each event.

Dust emissions on 10/18/2017 and 7/9/2018 were observed to emanate from the active area of the CCR Landfill and off-road haul truck operation over facility roads, respectively. On both occasions, a water truck was used to spray the surface where the dust emissions were observed.



The absence of visible dust emissions as noted during the following inspection appears to indicate that these measures were effective.

Table 2-1. Fugitive Dust Emission Events

Date	Time	Inspector	Inspector Notes	Supervisor Notes
			Dust from piles that	
10/18/2017	9:30 AM	T Parker	were spread	Water truck will spread water over areas
			Off-road truck	Roads have been wet by water truck. Loose
			stirring dust. Loose	piles from weekend will be spread and
7/9/2018	10:00 AM	R White	piles on active area.	packed.

Table 2-2 presents a list of operating conditions that could result in dust emission events recorded by GRU personnel during the reporting period with the date, time, inspector, and inspector and supervisor notes for each event. Eighteen (18) events associated with the presence of unloaded CCRs piles awaiting spreading and compaction were recorded. Visible dust emission was not observed during any of these weekly inspections. However, experience from CCR landfill operation suggests that loose CCR piles present an increased likelihood of dust emissions. On each of these 18 occasions, the loose material was spread and compacted within one week of observation. The supervisor estimated repair/action date in the inspection worksheets suggest that these loose piles were typically spread out and compacted within a couple of days of observation.



**Table 2-2. Fugitive Dust Emission-Related Events** 

Date/Time	Inspector	Inspector Notes	Supervisor Notes
12/28/17 10:30 AM	R White	Loose piles	No one to work landfill due to coal train. Will resume work when train is finished.
1/3/18 1:30 PM	C Partin	Loose piles	Being addressed
1/8/18 8:40 AM	S McMillan	100 plus dump truck loads need to be spread out	Loads will be spread out and packed in. With the frigid temperatures last week, the Coal Unit was at higher than expected load. This caused the generation of more than normal byproduct. With the resources from the department being used for emergency purposes to keep the unit online, we were unable to have an operator in the CCR Landfill spreading and packing the byproduct material. With the frigid temperatures subsiding we are now able to spread and pack in the loose piles.
1/16/18 8:15 AM	T Parker	Approximately 50 loads of byproduct to be spread	Loads are being spread and packed in. Byproduct material was hauled over the weekend to keep the silo level down.
1/22/18 7:30 AM	R Key	Lots of loose piles of byproduct on landfill need to be pushed out and leveled	Loose piles are from the weekend and will be spread and packed.
2/9/18 10:55 AM	C Partin	Loose piles on landfill	Emergency work in the plant has consumed the resources needed for spreading the loose piles. Piles will be spread as soon as possible.
2/12/18 8:00 AM	T Parker	Several piles of byproduct	Piles will be spread out and packed in
2/26/18 9:05 AM	C Partin	Loose piles on the active side of the landfill. Will be taken care of today	Piles from weekend work. Piles will be spread and packed in.
3/7/18 8:10 AM	S McMillan	Dump truck piles need to be spread on Cell #2.	Piles will be spread and packed in. Piles are from 3/6/15.
4/23/18 8:00 AM	R White	Loose piles need to be spread	Piles from the weekend will be spread and packed.
6/18/18 1:15 PM	S McMillan	Need to compact and roll pack fresh spread byproduct on south side of landfill	Will be addressed 6/19/18
6/25/18 7:30 AM	S McMillan	Many piles need to be spread out	Spreading out piles from the weekend hauled
7/30/18 8:00 AM	J Walker	Loose piles need to be pushed out	Dozer was down. Will start spreading piles.
8/6/18 8:00 AM	J Bennett	Loose piles need to be pushed out and compacted	Spread loose piles from weekend material hauled.
8/13/18 8:00 AM	J Bennett	Top needs worked and compacted	Compacting with the bulldozer
8/22/18 8:00 AM	J Bennett	Loose piles on active area	Piles will be pushed out and packed
8/27/18 9:00 AM	J Bennett	Piles need to be pushed out and packed	Piles from late Friday loads will be spread and packed
9/24/18 8:00 AM	T Parker	Over 80 loads to be spread	Loads will be spread and packed in. Loads are from the weekend.



#### 3.0 Citizen CCR Dust Complaint Logging

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.