



# 2019 Annual CCR Fugitive Dust Control Report

## *Great River Energy – Stanton Station*

Submitted to:

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December 11, 2019



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## FIGURES

Figure 1: Fugitive Dust Locations

## 1.0 INTRODUCTION

Golder Associates Inc. (Golder) has prepared this 2019 Annual Coal Combustion Residual (CCR) Fugitive Dust Control Report on behalf of Great River Energy (GRE) for Stanton Station. This report has been developed in accordance with recognized and generally accepted best management practices and as required under 40 CFR §257. 80(c). A description of the actions taken to control CCR fugitive dust is provided in this report. Citizen complaints and corrective measures regarding fugitive dust are addressed in Sections 3.0 and 4.0, respectively; there have not been any citizen complaints at Stanton Station for the 2019 reporting period (October 15, 2018 to October 15, 2019).

### 1.1 Facility Description

#### 1.1.1 Site History

Stanton Station was a coal-fired electric generation facility located in Mercer County, North Dakota, approximately three miles southeast of the city of Stanton along the Missouri River. The Stanton Station site covers an area of approximately 250 acres. The facility began generating power in 1966 and ceased power production in February 2017. Stanton Station has not produced CCRs or accepted for disposal any other CCRs generated offsite since 2017.

The co-mingled spray dryer/fly ash and fly ash from the other potential sources was managed in a dry landfill off-site, which was closed and covered in 2017. Economizer ash and bottom ash were managed together in the Bottom Ash CCR Surface Impoundment (Bottom Ash Impoundment), which was composed of three cells (north, center, and south), and the Bottom Ash CCR Landfill (Bottom Ash Landfill) as shown in Figure 1. These facilities are owned and operated by GRE and regulated by the North Dakota Department of Environmental Quality (NDDEQ).

#### 1.1.2 Site Closure and Restoration

Deconstruction and demolition of plant facilities were completed in 2019 and ongoing site restoration activities are expected to be completed in 2020, including closure of the Bottom ash Landfill and Bottom Ash Impoundment. The north and center cells of the Bottom Ash Impoundment were closed in 2019 by removal of CCR in accordance with the requirements of 40 CFR §257.102(c) while the south cell of the Bottom Ash Impoundment and the Bottom Ash Landfill will be closed in 2020 with CCRs in place in accordance with the requirements of 40 CFR §257.102(d). After closure, ongoing maintenance of the site will be performed in accordance with the applicable closure and post-closure care plans per 40 CFR §257.102(b) and 40 CFR §257.104(d).

Fugitive dust control measures through the site restoration activities, particularly in relation to the Bottom Ash Landfill and Bottom Ash Impoundment, are described in the Stanton Station Fugitive Dust Control Plan (Golder 2019). After site restoration is complete, the site (including the CCR containment facilities closed with CCR in place) will be seeded to establish vegetative cover.

### 1.2 Regulatory Requirements

Fugitive dust generated by CCR-related activities at Stanton Station is managed in accordance with the CCR Rule, 40 CFR §257. This Report is limited to addressing the annual requirements of the CCR Rule. This report will be maintained within the Operating Record and GRE's publicly accessible website for at least five years.

## 2.0 ACTIONS TAKEN TO CONTROL FUGITIVE DUST

Fugitive dust may be generated at Stanton Station by loading, transport, and placement operations. Although the facility ceased operations in February 2017, remnant CCRs continue to be loaded, transported, and placed to achieve final waste grades in preparation for final cover systems to be constructed at the Bottom Ash Landfill and Bottom Ash Impoundment. Control measures for fugitive dust generated from loading, transport, and placement of CCRs to achieve closure grades are described in the Stanton Station Fugitive Dust Control Plan (Golder 2019).

### 2.1 Handling and Loading

Bottom ash and economizer ash are contained in the Bottom Ash Landfill and Bottom Ash Impoundment. As a part of site restoration and closure of these facilities, CCRs are being transferred between the CCR facilities and CCRs are being re-graded within the facility footprints to accommodate final closure grades. Fugitive dust during handling and loading may be created by wind, excavation operations and/or truck loading operations. For CCR handling and loading, fugitive dust emissions were controlled by the following:

- Moisture conditioning bottom ash and economizer ash planned to be handled to limit dust emissions
- Reducing or halting operations during high winds

### 2.2 Transport

Control measures implemented to limit fugitive dust emissions from CCR transport were as follows:

- Restricting speeds onsite to 25 miles per hour (mph)
- Maintaining gravel surfaces on the onsite access roads at Stanton Station, as applicable
- Wetting onsite access roads with water or chemical dust suppressants as needed to limit fugitive dust generation and when temperatures are above freezing

### 2.3 Placement

Bottom ash and economizer ash were managed together in the Bottom Ash Impoundment and Bottom Ash Landfill at Stanton Station. In addition, CCRs generated offsite were used for stabilization and to achieve top of waste grades in preparation for closure of the south cell of the Bottom Ash Impoundment. At times, fugitive dust may have been created by vehicle traffic, truck unloading, maintenance operations, plant demolition, site restoration activities, and/or wind. Fugitive emissions from these operations were controlled by the following:

- Placing CCRs with sufficient moisture content to help reduce fugitive dust generation
- Limiting the fall distance from haul trucks
- Adding moisture to CCRs with a water truck after placement to prevent off-property transport of visible emissions
- Compacting CCRs after placement. Compaction may be achieved by making passes over spread materials with a haul truck or other heavy equipment
- Reducing or halting operations during high wind events

### 3.0 RECORD OF CITIZEN COMPLAINTS

Citizen complaints regarding CCR fugitive dust at Stanton Station were not received between October 15, 2018 and October 15, 2019. As stated in the Dust Control Plan, documentation of citizen complaints and implementation of corrective actions will be completed in accordance with GRE's Environmental Communication Procedure, Section 4.4.3. In summary, this procedure requires that the complaint will be recorded, the cause of the complaint will be investigated, and corrective action will be taken if warranted. The complaint will be incorporated into the annual report, along with a summary of the corrective measure(s) taken to address the complaint.

### 4.0 SUMMARY OF CORRECTIVE MEASURES TAKEN

CCR fugitive dust was sufficiently managed using the procedures described in the Dust Control Plan. Corrective measures were not needed during the period from October 15, 2018 to October 15, 2019.

### 5.0 RECORD KEEPING AND NOTIFICATIONS

The NDDEQ will be notified before the close of business on the day this annual report is placed in the Operating Record. Within 30 days of placement in the Operating Record, the annual report will be posted to the publicly accessible website. At least the five most recent annual reports will be retained in the Operating Record and posted to the website.

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Figure





#### REFERENCE(S)

1. AERIAL IMAGE FROM GREAT RIVER ENERGY PHOTOGRAPH, NOVEMBER 2019.





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