



# 2018 Annual CCR Fugitive Dust Control Report

## *Stanton Station*

Submitted to:

**Great River Energy**

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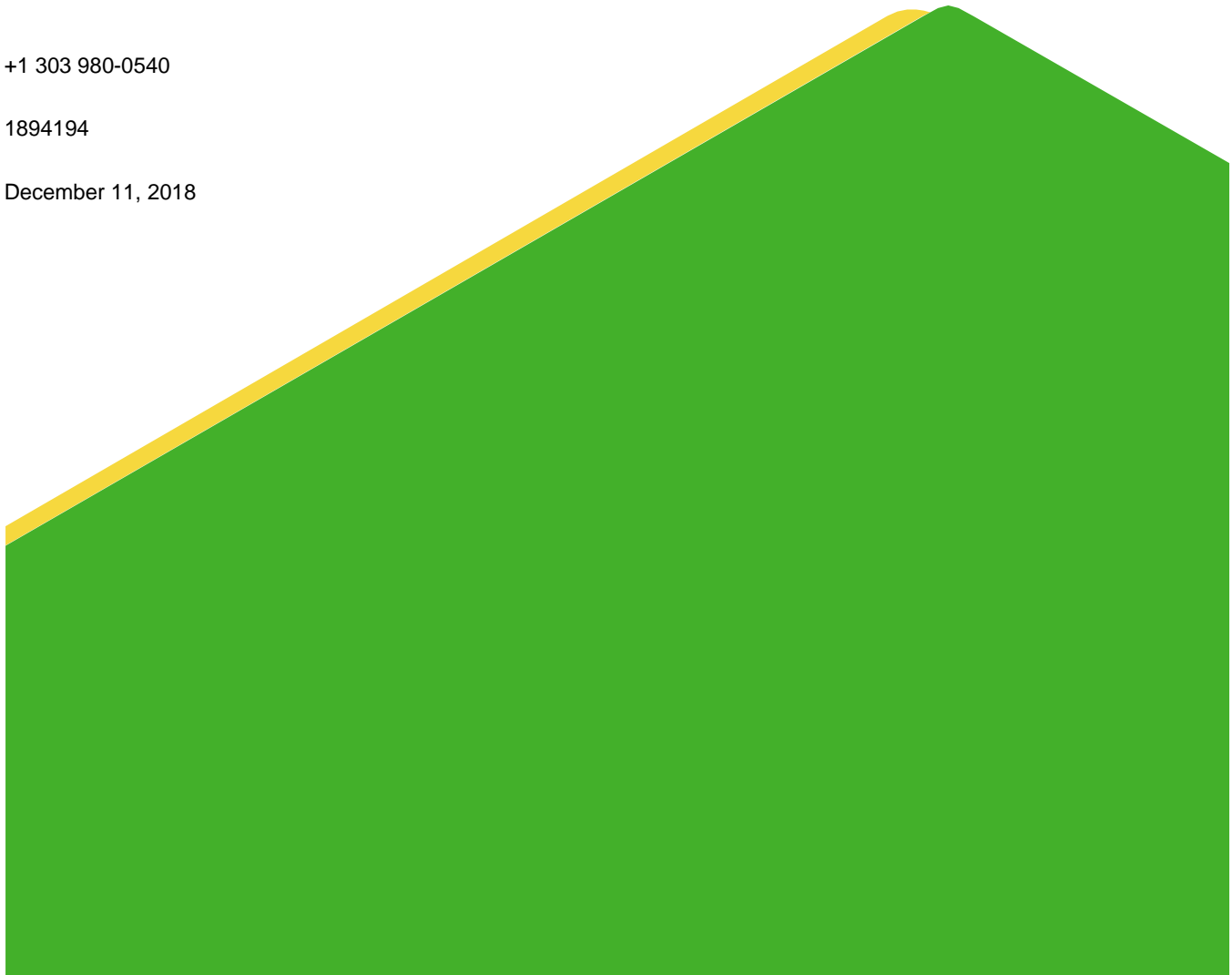
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Figure 1      Fugitive Dust Locations

## 1.0 INTRODUCTION

Golder Associates Inc. (Golder) has prepared this 2018 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). Provided in this report are a description of the actions taken to control CCR fugitive dust. 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 2018 reporting period (October 15, 2017 to October 15, 2018).

### 1.1 Facility Description

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 facility began generating power in 1966 and ceased power production in February 2017. Deconstruction and demolition of plant facilities is mostly complete; however, ongoing deconstruction and site restoration activities will continue for the next several years. The site covers an area of approximately 250 acres (Figure 1).

CCRs generated at Stanton Station included fly ash, bottom ash, spray dryer material (e. g. , flue gas desulfurization (FGD) material), and economizer ash. CCRs produced at the Hazen and Center Public Schools, GRE's Spiritwood Station, and Basin Electric Power Cooperative's Leland Olds Station may have also been deposited at Stanton Station prior to 2018. Stanton Station did not produce CCRs in 2018 and did not accept any other CCRs generated offsite.

Historically, co-mingled spray dryer/fly ash and fly ash from the other potential sources was managed in a dry landfill off-site. This landfill was closed, the in-place CCRs were re-graded, and a final cover was constructed over the facility in the fall of 2017.

Economizer ash and bottom ash were transported together to an impoundment and a dry landfill located at the Stanton Station Facility, which are owned and operated by GRE and regulated by the North Dakota Department of Health (NDDH). These two facilities are considered CCR facilities and are within the purview of the EPA CCR rule (Figure 1):

- Bottom Ash CCR Landfill (Bottom Ash Landfill).
- Bottom Ash CCR Surface Impoundment (Bottom Ash Impoundment) consisting of the north, center, and south cells.

Dust control measures associated with co-mingled spray dryer/fly ash and fly ash from the other potential sources are not discussed in this report since those materials were not produced and/or brought on site in 2018 and the dry landfill containing those materials was closed and covered in 2017.

However, the Bottom Ash Landfill and Bottom Ash Impoundment are not yet closed and dust control measures for management and handling of CCRs within these two facilities are described in this report. In addition, the Bottom Ash Impoundment and Bottom Ash Landfill will remain open for onsite construction and demolition waste during the deconstruction and demolition of Stanton Station. Dust control measures will continue to be implemented when handling, transporting, and placing CCRs between the Bottom Ash Impoundment and Bottom Ash Landfill.

## 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 Stanton Station'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 of 2017, remnant CCRs may continue to be loaded, transported, and placed when transferred between the Bottom Ash Landfill and Bottom Ash Impoundment to achieve final closure grades of those facilities. For these activities, control measures for fugitive dust have not changed substantially from the Dust Control Plan dated October 15, 2015. The Dust Control Plan will be amended as needed, maintained in the Operating Record, certified by a professional engineer registered in North Dakota, and posted to the publicly-accessible website.

### 2.1 Handling and Loading

Bottom ash and economizer ash are contained in the Bottom Ash Landfill and Bottom Ash Impoundment. During site restoration activities, these materials may be transferred between these CCR facilities 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:

- Moisture conditioning bottom ash and economizer ash planned to be handled to limit dust emissions.
- Transporting bottom ash and economizer ash to the landfill or impoundment with sufficient moisture content to limit fugitive dust generation.
- 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 haul roads at Stanton Station.
- Wetting onsite haul 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. At times, fugitive dust may have been created by vehicle traffic, truck unloading, CCR Facility maintenance operations, and/or wind. Fugitive emissions from these operations were controlled by:

- 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 pass 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 fugitive dust at Stanton Station were not received between October 15, 2017 and October 15, 2018. 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, 2017 to October 15, 2018.

### 5.0 RECORD KEEPING AND NOTIFICATIONS

The NDDH 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



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