

ANNUAL CCR FUGITIVE DUST CONTROL REPORT

Prepared for:



NRG Power Midwest LP
New Castle Generating Station
West Pittsburg, Pennsylvania

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List of Acronyms & Abbreviations

Annual Report	Annual Fugitive Dust Control Report
CCR	Coal Combustion Residuals
EMIS	Environmental Management Information System
mph	miles per hour
NRG	NRG Energy, Inc.
Plan	Fugitive Dust Control Plan
Rule	Disposal of Coal Combustion Residuals (CCR) from Electric Utilities final rule

1.0 Introduction

On December 19, 2014, the administrator of the U.S. Environmental Protection Agency signed the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities final rule (the Rule). The Rule was published in the Federal Register on April 17, 2015 and became effective on October 19, 2015. The Rule establishes a comprehensive set of requirements for the disposal of CCR in landfills and surface impoundments at coal-fired power plants under Subtitle D of the Resource Conservation and Recovery Act. These requirements include compliance with location restrictions, design criteria, operating criteria, groundwater monitoring and corrective action, and closure and post-closure care aspects. The operating criteria include air criteria specified in Title 40 of the Code of Federal Regulations, §257.80, to address the potential pollution caused by windblown dust from CCR units.

The New Castle Generating Station, operated by NRG Power Midwest LP (NRG), a subsidiary of NRG Energy, Inc., is a coal-fired power plant located in West Pittsburg, Pennsylvania. The Rule applies to this facility due to the management of CCR that is generated from the combustion of coal. CCR units associated with the station include the New Castle Plant Ash Landfill and the North Bottom Ash Pond.

According to the Rule, owners or operators of CCR units must adopt measures that will effectively minimize CCR from becoming airborne at the facility by developing and operating in accordance with a Fugitive Dust Control Plan (Plan) with adequate dust control measures. In this regard, a Plan was prepared to comply with the requirements as specified in §257.80(b)(1-7) of the Rule and placed in the New Castle facility's operating record on October 19, 2015 per §257.105(g)(1). As required, the Plan was also noticed to the State Director per §257.106(g)(1) and posted to the publicly accessible internet site per §257.107(g)(1).

In addition to the above and per §257.80(c), an Annual Fugitive Dust Control Report (Annual Report) must be completed that includes the following:

- Description of actions taken to control CCR fugitive dust
- Record of all citizen complaints
- Summary of any corrective actions taken

The initial Annual Report must be completed no later than 14 months after placing the Plan in the facility's operating record. This document represents the initial Annual Report for New Castle and will also be appropriately placed in the facility's operating record per §257.105(g)(2), noticed to the State Director per §257.106(g)(2), and posted to the publicly accessible internet site per §257.107(g)(2).

2.0 Actions Taken to Control CCR Fugitive Dust

As detailed in the Plan and reiterated below, the station has established procedures and inspection requirements which are implemented to minimize/eliminate airborne emissions from the potential fugitive dust sources. The results from inspections conducted and associated observations made during CCR handling activities are documented on logs maintained in the station's Environmental Department, including those specific to the one-year period (November 2015 to November 2016) relevant to this initial Annual Report. It is further acknowledged that during this time, the New Castle station added natural gas as a firing sources for the boilers and effectively transitioned away from burning coal on June 1, 2016, although this capability is retained. As such, the generation and management of CCR materials was limited to approximately the first half of the reporting period covered by this Annual Report.

2.1 Fly Ash Handling

Fly ash is recovered from the hoppers at the base of the electrostatic precipitators and is pneumatically conveyed to a silo controlled with a bin vent filter for storage. In the silo, the fly ash is conditioned with water (wetted to approximately 15-20 percent moisture), mixed, and then the wet fly ash is gravity loaded into a truck. After loading is complete, the trucks travel to the New Castle Plant Ash Landfill via internal roadways that are watered for fugitive dust control. Fly ash has been removed from the hoppers and silo. These units will be maintained in the event the station returns to burning coal.

2.1.1 Monitoring/Recordkeeping

The facility maintains a log of all reported fugitive emissions that deviate from the opacity limitations set forth in the Title V Operating permit; this log documents the cause of the deviation and the corrective action taken to abate the situation. The facility also maintains a dust suppression log that includes the date and time of water application, the weather condition, the gallons of water applied and the area where water was applied. The completed logs are forwarded to the station's Environmental Department and retained for at least five years

2.2 North Bottom Ash Pond Cleaning

As necessary, the North Bottom Ash Pond is periodically cleaned out to remove accumulated bottom ash materials and to restore capacity for settling solids. When cleaning is performed, it is done while the Station is offline (either scheduled outage or economic considerations) so that ash sluicing operations can be temporarily halted. To support the cleaning, the pond is partially drained to expose the underlying ash materials which are then scraped from the bottom and placed along the pond side slopes and near the top of the berm to promote further dewatering. Once the bottom ash materials have sufficiently dewatered (but not to the point of becoming

dry), they are removed and loaded into trucks which then transport the materials to the New Castle Plant Ash Landfill. After the cleaning is completed, normal operations are restored.

Although the North Bottom Ash Pond is considered a CCR unit, it is not represented as a viable contributing source of CCR fugitive dust emissions since entering streams are managed in an enclosed conveyance system; once in the pond, the materials are maintained in a submerged condition.

2.3 Transport Roadways

Road surfaces leading to the New Castle Plant Ash Landfill are watered to reduce fugitive dust emissions. The amount of time dedicated to watering the roads is a function of the dryness of the surface and is determined through daily observations by station personnel. The amount of water applied varies seasonally. Fugitive dust emissions are further controlled by posting and maintaining a maximum vehicle speed limit of 10 miles per hour (mph) on unpaved roadways within the boundaries of the station property. The routine transportation of CCR to the landfill has been discontinued with the addition and use of natural gas.

2.3.1 Monitoring/Recordkeeping

The facility maintains a log of all reported fugitive emissions that deviate from the permitted opacity standards. The facility also maintains a dust suppression log that includes the date and time of water application, the weather condition, the gallons of water applied and the area where water was applied. The completed logs are forwarded to the station's Environmental Department and retained for at least five years.

2.4 New Castle Plant Ash Landfill

Fly ash and bottom ash are transported by trucks from the station to the New Castle Plant Ash Landfill. Fugitive dust is minimized at the Ash Landfill by spreading and compacting the materials with a bulldozer as soon as practical after being delivered (i.e., the freshly dumped materials are not left on the landfill surface for extended periods of time). Additionally, a water truck regularly circulates to spread water on the internal roadways and is able to service the open operating areas of the disposal site. Vehicle traffic operating within the disposal site is restricted to a 10 mph speed limit on unpaved roadways. The routine transportation of CCR to the landfill has been discontinued with the addition and use of natural gas.

2.4.1 Monitoring/Recordkeeping

The facility maintains a log of all reported fugitive emissions that deviate from the opacity limitations set forth in the Title V Operating permit, the cause of the deviation and the corrective action taken to abate the situation. The facility also maintains a dust suppression log that includes the date and time of water application, the weather condition, the gallons of water applied and the area where water was applied. The completed logs are forwarded to the station's Environmental Department and retained for at least five years.

3.0 Record of Citizen Complaints

Per the Rule, the Annual Report must include a record of all citizen complaints that were received by the New Castle station with regard to fugitive dust emission incidents. In line with established protocols and within 24 hours of receipt, the station's environmental coordinator enters the citizen complaint into NRG's Environmental Management Information System (EMIS) database. The EMIS database then automatically forwards notice of the complaint to the station manager, NRG's regional environmental manager, and NRG's Corporate Environmental Department. Following initial evaluation of the complaint, NRG then conducts a thorough investigation to confirm the reported incident/conditions and implement corrective actions as may be warranted.

No complaints were registered during this Annual Report's period of record covering November 2015 through November 2016.

4.0 Summary of Corrective Actions Taken

For the November 2015 to November 2016 period of record, and based on continued monitoring and inspections as outlined in Section 2.0, the currently established control measures remain effective in minimizing potential fugitive dust emissions. Moreover, this assertion is further validated by the lack of citizen complaints logged over this same period. Accordingly, no corrective actions were undertaken during the past year, either as a result of internally identified deficiencies or from resolution of citizen complaints.