ANNUAL CCR
FUGITIVE DUST CONTROL REPORT

Prepared for:

NRG Power Midwest LP
Cheswick Generating Station
Springdale, Pennsylvania

Prepared by:

CB&I Environmental & Infrastructure, Inc.
Pittsburgh, Pennsylvania

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List of Acronyms & Abbreviations

Annual Report	Annual Fugitive Dust Control Report
CCR	Coal Combustion Residuals
Emergency Pond	Bottom Ash Emergency Pond
EMIS	Environmental Management Information System
mph	miles per hour
NRG	NRG Energy, Inc.
PADEP	Pennsylvania Department of Environmental Protection
Plan	Fugitive Dust Control Plan
Recycle Pond	Bottom Ash Recycle Pond
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 Cheswick Generating Station, operated by NRG Power Midwest LP (NRG), a subsidiary of NRG Energy, Inc., is a coal-fired power plant located in Springdale, 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 Cheswick Ash Disposal Site, the Bottom Ash Recycle Pond (Recycle Pond), and the Bottom Ash Emergency Pond (Emergency 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 Cheswick 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 Cheswick 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.

2.1 Fly Ash Handling

Fly ash is recovered from the hoppers at the base of the electrostatic precipitator and is pneumatically conveyed to a silo controlled with a bin vent filter for storage. From the silo, the fly ash is loaded into a truck where the load-out point is controlled with a water spray system (barrier curtain). Additionally, emissions from trucks are reduced by keeping a light load in the bed that is not equal to the full capacity of the truck. This allows for available freeboard on the truck bed walls, reducing the amount of dust that is likely to escape out of the bed prior to tarping. After loading is complete, the truck is tarped and driven through a truck wash prior to traveling to the Cheswick Ash Disposal Site.

2.1.1 Monitoring/Recordkeeping

Observations of visible emissions from the fly ash handling activities are performed once per week during normal daylight operations. A trained employee records whether any emissions are observed and whether these emissions extend beyond the facility property line. Fly ash handling records are maintained in logs completed by station personnel and include the following:

- Daily records of each time the water suppression system is used at the fly ash silo (Log RCW 5.9-1A)
- Weekly records of visible emission observations of the fly ash handling operations (Log RCW 5.10-1)
- Weekly records confirming that the fly ash is uniformly wet (Log RCW 5.8-1)

The completed logs are forwarded to the station's Environmental Department and retained for at least five years.

2.2 Bottom Ash Ponds Cleaning

As necessary, the Recycle and Emergency Ponds are periodically cleaned out (typically on an annual basis) to remove accumulated bottom ash materials and to restore capacity for settling solids. To support the cleaning, operations are first transferred to the idle pond (by re-routing the

hydrobin discharge) and then the affected pond is taken out of service. The pond to be cleaned is drained to expose the underlying ash materials which are then scraped from the bottom and placed along the pond side slopes to promote further dewatering. Once the bottom ash materials have sufficiently dewatered (but not to the point of becoming dry), they are removed from the pond and loaded into tarped trucks. The tarped trucks pass through a truck wash and then travel to the Cheswick Ash Disposal Site. After the cleaning is completed, normal operations are restored, maintaining preferential use of the Recycle Pond.

2.3 Gypsum Handling

Fugitive dust from the handling and transport of gypsum is controlled using enclosed conveyors and transport points combined with water application. Damp gypsum materials awaiting transport are temporarily stored in an enclosed dome and then eventually loaded into trucks via a front-end loader. The trucks are tarped prior to leaving the dome and then driven through a truck wash before traveling to either the Cheswick Ash Disposal Site or to wallboard manufacturing facilities. Barge loading operations from the dome are conducted using an enclosed conveyor system with a telescoping chute which minimizes the open drop distance of the gypsum and the potential for dust generation. The roads and area surrounding the gypsum dome are watered on an as-needed basis.

2.3.1 Monitoring/Recordkeeping

Observations of visible emissions from the gypsum handling activities are performed once per week during normal daylight operations. A trained employee records whether any emissions are observed and whether these emissions extend beyond the facility property line. Gypsum handling records and visible emissions observations are maintained in weekly logs completed by station personnel (Log RCW 5.4-1). The completed logs are forwarded to the station's Environmental Department and retained for at least five years.

2.4 Transport Roadways

Paved and unpaved road surfaces internal to the station and the Cheswick Ash Disposal Site 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. Roads and parking lots are also periodically swept to reduce potential entrainment of dust. Fugitive dust emissions are further controlled by posting and maintaining a maximum vehicle speed limit of 10 miles per hour (mph) within the boundaries of the station property.

All trucks exiting the station and carrying fly ash, bottom ash, or gypsum are equipped with automatic tarping systems that are designed to provide an adequate seal and prevent windblown

CCR emissions during transport. Drivers routinely inspect the tarping system for proper closure, tears, rips, or any other defects that could contribute to excessive dust emissions during transport.

2.4.1 Monitoring/Recordkeeping

Monitoring of fugitive dust from roadways is accomplished by maintaining a log of the time, location, type, and amount of roadway surface treatment. Roadway maintenance records regarding watering/dust control are documented in daily logs (Log RCW 5.6-1) completed by station personnel. The completed logs are forwarded to the station's Environmental Department and retained for at least five years.

2.5 Cheswick Ash Disposal Site

Fly ash, bottom ash, and gypsum are transported by tarped and washed trucks from the station to the Cheswick Ash Disposal Site. Fugitive dust is minimized at the Ash Disposal Site 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 the open operating areas of the disposal site. Vehicle traffic operating within the disposal site is restricted to a 15 mph speed limit. Before exiting the Ash Disposal Site and returning to public roadways, trucks are required to pass through a truck wash to remove excess dust.

2.5.1 Monitoring/Recordkeeping

Seven dust fall monitors are installed at the Ash Disposal Site in locations approved by the Pennsylvania Department of Environmental Protection (PADEP). Dust Fall Reports are submitted to PADEP quarterly as a condition of the Solid Waste Permit. Records of dust control activities, including road watering and sweeping, are maintained as part of a Daily Operations Checklist completed by supervising personnel at the Ash Disposal Site. The completed checklists 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 Cheswick 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.