



**NRG BRANDYWINE ASH STORAGE SITE
BRANDYWINE, MARYLAND
2017 ANNUAL CCR FUGITIVE DUST CONTROL REPORT**

To: Walter Johnson, NRG MD Ash Management LLC
From: Jeffrey Hutchins, P.E., AECOM
Date: December 7, 2017
RE: Annual CCR Fugitive Dust Control Report
Brandywine Ash Storage Site Operating Cell Phase 2

1.0 Introduction

As of April 17, 2015, the Brandywine Ash Storage Site has been regulated by the Code of Federal Regulations (CFR) under 40 CFR §257 Subpart D – Standards for Disposal of Coal Combustion Residuals (CCR) in Landfills and Surface Impoundments. Section §257.80 required NRG to prepare a CCR Fugitive Dust Control Plan and place it into NRG’s operating record by October 19, 2015. Section §257.80(c) requires NRG to prepare an annual CCR Fugitive Dust Control Report that includes a description of the actions taken by the owner or operator to control CCR fugitive dust, a record of all citizen complaints, and a summary of any corrective measures taken. The first annual report was completed and placed in NRG’s operating record by December 19, 2016 – as required under the regulations – 14 months after placing the Initial CCR Fugitive Dust Control Plan in the facility’s operating record. Subsequent Annual Reports are required to be completed and placed in NRG’s operating record one year after the date of completing the previous report. This 2017 Annual Report will be completed and placed in the NRG operating record by December 19, 2017.

2.0 Summary of Current CCR Fugitive Dust Control Measures

The Brandywine Ash Storage Site receives and stores CCRs produced at NRG’s Morgantown and Chalk Point Generating Stations. CCR transferred to the Brandywine Site is offloaded and stored in the currently operational Phase 2 area (Phase 2A). During the period from December 1, 2016 to December 1, 2017, NRG has fully implemented the measures described in the Initial CCR Fugitive Dust Control Plan to control all sources of CCR fugitive dust resulting from NRG operations at the two generating stations and at the Brandywine site. During the reporting period, AECOM professional staff have been on site daily at the Brandywine site to monitor construction activities, including CCR fugitive dust control measures being implemented by NRG.

NRG has not received any citizen input or complaints during this reporting period, and thus no corrective measures have been required to be implemented.

NRG Generating Stations

All CCR that is shipped to the Brandywine Ash Site from the Morgantown and Chalk Point Generating Stations is conditioned with water before loading and leaving the station.

- Fly ash generated at these two generating stations is stored in large diameter concrete silos, and then is released through closed systems into a conditioning mixer system located on a superstructure above the haul truck loading area.
- Fly ash is mixed with water until the NRG operator determines that the ash has the appropriate moisture content to be transported to the Brandywine site. The ash is

then loaded in the semi-trucks or dump trucks for hauling to the Brandywine Ash Site.

- Bottom ash generated at the two plants is also conditioned with water to an acceptable consistency, as determined by the NRG operator, with a moisture content to load into trucks for hauling to the Brandywine Ash Site.

Transportation of CCRs to the Brandywine Ash Site

CCRs are transported from NRG's Morgantown and Chalk Point Generating Stations by means of semi-trucks and dump trucks that are fully enclosed on all four sides and have been completely covered with a firmly secured tarp system to prevent loss of CCR and to minimize dust emissions during transportation.

- Before leaving the respective generating stations, vehicles transporting CCRs are inspected by the transporter and cleaned of any excess material or debris that could blow off, fall off, or spill during transportation. The transporter maintains an inspection log in the truck for 30 days for each of these inspections.
- Trucks are washed at the plant's truck washing station to control tracking of CCRs onto plant roads and onto public roads.
- Truck speeds are limited to 15 mph on site haul roads.

Offloading and Emplacement of CCRs

- When the CCR haul trucks arrive at the Brandywine Site, they are routed to the active fill area in Phase 2A. Haul roads are posted with a maximum speed limit of 15 mph as a safety measure and to minimize the generation of dust.
- CCRs are deposited at the working face under the direction of a site operator also serving as a spotter. CCRs are spread over the current working face with a bulldozer in uniform lifts and compacted with a smooth-drum roller.
- The active CCR working areas are routinely watered by the facility's dedicated mobile water truck to maximize ash compaction and for dust suppression. The water truck is permanently on site and refills from the onsite ponds and other resources.
- Trucks and equipment are cleaned inside Phase 2A and all trucks are cleaned and/or washed at the facility's truck wash station prior to leaving the Brandywine Site.

Road Watering

During hauling operations, tracking of CCRs onto the site access roads is controlled at all times to prevent transport of CCRs beyond the active area of Phase 2 by periodic washing of trucks and equipment, and scraping material from tires and equipment tracks. NRG currently controls the presence of CCRs, dust, and mud on the paved and unpaved access roads by frequent wetting of the roads by way of the site's dedicated mobile water truck.

- Water trucks apply water at regular intervals (approximately once every three hours) during daily operations and construction, beginning at the start of each day's activities and at routine intervals thereafter.
- Paved areas and access roads are visually inspected on a daily basis during construction and operations to determine the presence of CCRs, sediment, and dust. All CCRs and sediment material are routinely removed and disposed of back into Phase 2, and roads receive water from the dedicated water truck to minimize dust generation.
- Unpaved areas that carry vehicle traffic are visually inspected on a daily basis during construction and operations, and receive water to reduce dust. CCRs and excess sediment are removed and disposed of back into Phase 2.

3.0 Citizen Input

The Site Supervisor maintains a formal log dedicated to citizen input and complaints regarding fugitive dust emissions from the Brandywine Site and public roads leading to the site. This form was included as part of the Initial CCR Fugitive Dust Control Plan. During the reporting period from December 1, 2016 to December 1, 2017, there were no citizen complaints or input provided by citizens recorded by the Site Supervisor. As a result, no corrective measures were required to be implemented.

4.0 Summary

During the reporting period from December 1, 2016 to December 1, 2017, NRG implemented the measures presented in the Initial CCR Fugitive Dust control Plan to control fugitive CCR dust from the Brandywine Ash Site and from the generation and transport of CCRs from the Chalk Point and Morgantown Generating Stations to the Brandywine site. During the reporting period, there were no citizen complaints or input recorded by the Site Supervisor and no corrective measures were required.

Reporting Company: AECOM

AECOM Representative: Jeffrey Hutchins Date: 12/7/17



12420 Milestone Center Drive, Suite 150
Germantown, MD. 20876
Tel: 301.820.3000 Fax: 301.820.3009
www.aecom.com