



**GENON BRANDYWINE ASH STORAGE SITE
BRANDYWINE, MARYLAND
2021 ANNUAL CCR FUGITIVE DUST CONTROL REPORT**

To: Jay Spence, GenOn MD Ash Management LLC (GenOn)
From: Tom White, P.E., AECOM Technical Services, Inc. (AECOM)
Date: December 17, 2021
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 (Brandywine Site) located at 11700 North Keys Road, Brandywine, Prince George's County, Maryland 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 GenOn to prepare a CCR Fugitive Dust Control Plan and place it into GenOn's operating record by October 19, 2015. Section §257.80(c) requires GenOn 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 GenOn'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 GenOn's operating record one year after the date of completing the previous report. This 2021 Annual Report will be completed and placed in the GenOn operating record by December 19, 2021.

2.0 Summary of Current CCR Fugitive Dust Control Measures

The Brandywine Site has historically received and stored CCRs produced at GenOn's Morgantown and Chalk Point Generating Stations in Newburg, MD and Aquasco, MD, respectively. The Morgantown Generating Station will be decommissioned on June 1, 2022, and the Chalk Point Generating Station was decommissioned on June 1, 2021. Disposal of CCR material at the Brandywine site during the report period was limited. During the period from December 1, 2020 to December 1, 2021, the Brandywine site received 12,220 tons of CCR material (mostly bottom ash) from the Morgantown Generating Station and 4,328 tons of CCR material (pond solids and bottom ash) from the Chalk Point Generating Station for a total tonnage received of 16,548 tons.

CCR's transferred to the Brandywine Site are currently offloaded and stored in the operational area of Phase 2A. During this reporting period from December 1, 2020 to December 1, 2021, GenOn has fully implemented the measures described in the Initial CCR Fugitive Dust Control Plan to control all sources of CCR fugitive dust resulting from GenOn's operations at the Morgantown and Chalk Point Generating Stations and the Brandywine Site. GenOn has not received any citizen input or complaints during this reporting period, and thus no corrective measures have been required to be implemented.

GenOn Morgantown and Chalk Point Generating Stations

All CCRs that are shipped to the Brandywine Ash Site from the Morgantown and Chalk Point Generating Station are either conditioned with water before loading and leaving the station or have sufficient moisture content to minimize fugitive dust emissions.

- Fly ash generated at the 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 GenOn 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 plants is also conditioned with water as necessary to an acceptable moisture content, as determined by the GenOn operator, to load into trucks for hauling to the Brandywine Ash Site.
- Pond solids typically have a sufficient moisture content to minimize fugitive dust emissions.

Transportation of CCRs to the Brandywine Ash Site

CCRs are transported from GenOn'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 CCRs and to minimize dust emissions during transportation.

- Before leaving the generating station, 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. Pond solids are typically stockpiled in the active work area until they have sufficiently dried, then it is spread and compacted in uniform lifts.
- The active CCR working area is routinely watered by the facility's dedicated mobile water truck to maximize ash compaction and for dust suppression. The mobile water truck is filled from an onsite groundwater well near the Wastewater Treatment Facility for watering of the active CCR working area.
- 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.

Fugitive Dust Control Measures

During the 2021 reporting period, fugitive dust control by GenOn has consisted of implementing dust control measures on the existing CCR surface of Phase 2A and Brandywine's internal roadways. GenOn personnel inspect the CCR surface of Phase 2A daily to determine if the CCR surface has dried to a point where fugitive dust could be an issue in the near future. Observations of any fugitive dust issues and control measures employed to mitigate these issues are documented in the site's daily log and weekly CCR inspection reports that are maintained at the site office trailer. GenOn personnel utilize the following methods to control fugitive dust at such time when it is deemed necessary to control CCR dust from Phase 2A.

- **Short Term:** GenOn utilizes a dedicated mobile water truck onsite that it fills from an onsite groundwater well near the Wastewater Treatment Facility. GenOn uses this dedicated water truck to spray water and thoroughly wet the existing CCR surface of Phase 2A.
- **Longer Term:** If needed, for longer term control of fugitive dust, GenOn uses a proprietary product "DustCap" manufactured by Terra Novo, which is a specifically formulated liquid product for dust control. It is a high concentration liquid (2.5 gallons) that is mixed with 4,000 gallons of water in the site's water truck and sprayed onto the CCR surface of Phase 2A. Once sprayed on the surface, DustCap forms a crusty surface on top of the CCR that maintains moisture in the CCR and inhibits the formation of dust. The crusty surface can last for many weeks if the crust is not broken by equipment or machinery riding on top of it.

Road Watering

Paved and aggregated-surfaced areas and access roads are visually inspected on a daily basis to determine the presence of CCRs, sediment, and dust. All CCRs and sediment material are routinely removed and disposed in the Phase 2A active working area using site operating equipment. Roads receive water applied from the site's dedicated mobile water truck to minimize dust generation. Unpaved areas that might carry vehicle traffic are visually inspected and receive water to reduce dust as well. For watering of roads and areas outside of the lined Phase 2 disposal area, the mobile water truck uses water supplied from an onsite groundwater monitoring well.

3.0 Citizen Input

The site 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, 2020 to December 1, 2021, there were no citizen complaints or input provided by citizens received by the Brandywine Site. As a result, no corrective measures were required to be implemented.

4.0 Summary

During the reporting period from December 1, 2020 to December 1, 2021, GenOn implemented the measures presented in the Initial CCR Fugitive Dust control Plan to control fugitive CCR dust from the active Phase 2A cell at the Brandywine Site and from the generation and transport of CCRs from the Morgantown and Chalk Point Generating Stations to the Brandywine site. During the reporting period, there were no citizen complaints or input received by the Site Supervisor and no corrective measures were required.

Reporting Company: AECOM Technical Services, Inc.

Representative: Thomas White Date: 12/17/2021



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