CCR Fugitive Dust Control Plan

A.B. Brown Ash Pond, Landfill, and Landfill Settling Basin

Version: 2.0

February 16, 2022

Revision Log

Date	Revision	Revision Notes	Reviser's Initials
	Level		
10/16/2015	1.0	Initial Plan	LCM (Vectren)
02/16/2022	2.0	Revised Plan	JDM (AECOM)

BACKGROUND AND CURRENT CONDITIONS

The AB Brown Generating Station (AB Brown) is located in Posey County, Indiana and is owned and operated by Southern Indiana Gas and Electric Company doing business as CenterPoint Energy Indiana South (CenterPoint). The AB Brown Ash Pond (Ash Pond) is a CCR unit that was commissioned in 1978 and is actively receiving CCR materials. Under normal circumstances, primarily bottom ash is sluiced to the Ash Pond while a dry fly ash handling system is utilized to send fly ash to an offsite beneficial user. In addition, small amounts of flue gas desulfurization (FGD) solids in wash water from the floor drains in the scrubber belt filter and truck loading area are pumped to the Ash Pond for settling.

Other CCR units at the site consist of the AB Brown Type III RWS Landfill (Landfill) and the Landfill Settling Basin. The waste currently placed in the Landfill consists solely of FGD sludge. The material is conditioned with water prior to transport to the Landfill. The material is then placed in trenches located within the limits of the landfill. Water from the trenches is piped to the Landfill Settling Basin. Any solids carried by the water settle out in the Landfill Settling Basin prior to the water eventually receiving further treatment. The FGD sludge is removed from the trenches and stockpiled in the Landfill using a dragline excavator. The stockpiled material is then either loaded into trucks for transport to other portions of the landfill or spread and compacted for final disposal at that location. Once the FGD sludge has been placed and compacted, it is either covered with an intermediate soil cover, an alternative cover, or with final cover soils.

A project is underway to carry out the following activities at the Ash Pond:

- Excavate all CCR (Coal Combustion Residual) materials located within the Ash Pond footprint.
- Haul, stockpile, manage and load ponded CCR materials onto a pipe conveyor system for loading onto a barge and transport offsite for beneficial reuse (recycling). Prior to loading the pipe conveyor, CCR materials will be tested at an on-site lab for conformance with the recycler's requirements. CCR materials that do not conform with the recycler's requirements will be temporarily stored within the limits of the Ash Pond; these materials may ultimately be disposed at the onsite FGD Landfill, subject to approval by IDEM.
- Once removal of all CCR materials from within the Ash Pond footprint has been confirmed, the project area will be re-graded and disturbed surfaces will be stabilized with topsoil and vegetative cover. Dust generation is not anticipated from the project area once the site is stabilized.

This Plan has been amended to reflect the change in conditions associated with the ongoing construction activities at the Ash Pond.

FUGITIVE DUST CONTROL MEASURES

The following paragraphs state the applicable regulation from 40 CFR § 257.80(b) regarding content of this CCR Fugitive Dust Control Plan (Plan) and discuss how the requirements of the regulation are met.

\$257.80(b) The owner or operator of the CCR unit must prepare and operate in accordance with a CCR fugitive dust control plan as specified in paragraphs (b)(1) through (7) of this section. This requirement applies in addition to, not in place of, any applicable standards under the Occupational Safety and Health Act.

This document outlines the plan to be utilized to control dust at the CCR Units (Ash Pond, Landfill, and Landfill Settling Basin) at the A.B. Brown Generating Station, which is located near West Franklin, Indiana. This Plan identifies the procedures that will be utilized at the units to ensure compliance with Section 257.80(b) of the CCR Rule, which requires the implementation of a dust control plan to minimize the potential for CCR to become airborne.

§257.80(b)(1) The CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility. The owner or operator much select, and include in the CCR fugitive dust control plan, the CCR fugitive dust control measures that are most appropriate for site conditions, along with an explanation of how the measures elected are applicable and appropriate for site conditions.

In general, the main objective is to control fugitive dust that can affect the air quality of the area. For work within the Ash Pond (excavation of materials for beneficial reuse and future closure of the pond), prior to the start of construction, the criteria for compliance and administration of the environmental pollution control program, including fugitive dust control, will be established. Contractors working within the Ash Pond are required to comply with all applicable federal, state, and local laws and regulations concerning environmental pollution control or abatement, as well as obtaining the correct permits for the work performed in this area.

During the handling of CCR material (including excavation, hauling, management of stockpiles, conveyor loading, etc.) the low mass and small particle size of dry or low moisture CCRs will have the tendency to become airborne by simple disturbances and natural air currents. In instances where the existing moisture content of the excavated material is unable to prevent dust suppression, dust control will be necessary. Contractors working within the Ash Pond are responsible for control of any fugitive dust generated during construction and will implement the most appropriate, practicable and effective means necessary.

The primary method proposed for dust control will be use of water trucks to spray the ash. In cases where it is not practical to use water trucks, or for specific static areas, atomized mists (or an equally effective abatement technology) shall be used. Mists function by creating millions of tiny droplets of a specific size range and delivering them at relatively high velocity over a wide coverage area, including collisions with dust particles resulting in these particles being driven to the ground. Atomized mist units can be tower mounted to increase the range and coverage area, delivering precise aiming, and overlapping coverage to provide adequate control. Contractors working within the Ash Pond shall utilize such practicable methods and devices as are reasonably available to control, prevent, and otherwise minimize dust generation.

In addition to water application-based methods, other acceptable means of dust control involve use of a commercial dust control product or chemical dust suppressant, including but not limited

to the following: lignin-based materials, Soil-Sement, Eco-Flex, Eco Green Barrier, EcoBlend, Gorilla-Snot, TackDown, Mincryl X50, Steadfast, Pennz Suppress, Coconut Mats, etc. If commercial dust control products are to be used, they are to be dispersed over the exposed ash areas in addition to or in place of water application.

For work within the <u>FGD Landfill</u>, as required in the A.B. Brown Landfill Permit, the waste is placed within the landfill in compacted lifts and covered annually with either a 6-inch layer of intermediate soil cover or final cover soils. The A.B. Brown Landfill has successfully controlled fugitive dust from the landfill in the past using the operational procedures outlined below. Since these procedures have been successful in minimizing fugitive dust, the facility has incorporated them into the Dust Control Plan.

- The water content of waste will be adjusted, to the extent possible, to condition the material prior to placement in the landfill.
- As needed, a water truck will be utilized to spray water on the exposed surface of the waste.
- The traffic of support equipment will be directed to use specific areas, as needed, to minimize the disturbance of the waste in any non-active areas.
- In some areas, berms may be constructed to serve as wind breaks.
- In extreme high wind conditions, the placement of waste in the landfills with the dragline excavator may be delayed to the extent possible by leaving the waste in the trenches.

In addition to utilizing the procedures outlined above, CenterPoint will use commercial dust control products on an as-needed basis prior to covering the waste with intermediate cover or final cover, including but not limited to the following: lignin-based materials, Soil-Sement, Eco-Flex, Eco Green Barrier, EcoBlend, Gorilla-Snot, TackDown, Mincryl X50, Steadfast, Pennz Suppress, Coconut Mats, etc.)

In the event that the use of a combination of the operational procedures and alternative cover materials outlined above do not provide the required dust control, CenterPoint will add soil materials as needed. CenterPoint will either maintain a stockpile of cover soils near the landfill or provide all weather access to a near-by soil borrow area for this purpose.

§257.80(b)(2) If the owner or operator operates a CCR landfill or any lateral expansion of a CCR landfill, the CCR fugitive dust control plan must include procedures to emplace CCR as conditioned CCR. Conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust suppression agent.

As discussed previously, the waste that is currently placed in the AB Brown Landfill consists solely of FGD sludge. The material is conditioned with water prior to transport to the Landfill. The material is then placed in trenches located within the limits of the landfill. The waste is removed from the trenches and placed in the landfill using a dragline excavator. The stockpiled material is then either loaded into trucks for transport to other portions of the landfill or spread and compacted for final disposal at that location. Once the waste has been placed and compacted, it is either covered with an intermediate soil cover, an alternative cover or with final cover soils.

 $\underline{\$257.80(b)(3)}$ The CCR fugitive dust control plan must include procedures to log citizen complaints received by the owner or operator involving CCR fugitive dust events at the facility.

In the event citizen complaints regarding fugitive dust are received, those complaints will be logged, investigated, and responded to as appropriate. Complaints may be submitted via telephone or by sending an email to CCR_Inquiries@centerpointenergy.com.

 $\underline{\$257.80(b)(4)}$ The CCR fugitive dust control plan must include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan.

This Plan will be reviewed on at least an annual basis by CenterPoint's Environmental Affairs department. In addition to utilizing the operational procedures outlines in 257.80(b)(2), observations regarding fugitive dust are made by trained employees as required by the current Title V Air Permit.

§257.80(b)(5) The owner or operator of a CCR unit must prepare an initial CCR fugitive dust control plan for the facility no later than October 19, 2015 or by initial receipt of CCR in any CCR unit at the facility if the owner or operator becomes subject to this subpart October 19, 2015. The owner or operator has completed the initial CCR fugitive dust control plan when the plan has been placed in the facility's operating record as required by §257.105(g)(1).

The initial plan was prepared and placed into the operating record on October 16, 2015.

§257.80(b)(6) Amendment of the plan. The owner or operator of a CCR unit subject to the requirements of this section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by §257.105(g)(1). The owner or operator must amend the written plan whenever there is a change in conditions that would substantially affect the written plan in effect.

This Plan has been amended to reflect the change in conditions associated with the ongoing construction activities at the Ash Pond. This plan will be updated in the future as needed based on the results of reviews of the plan's effectiveness, when operational procedures warrant an update, or when another change in conditions warrant an update.

 $\underline{\$257.80(b)(7)}$ The owner or operator must obtain a certification from a qualified professional engineer that the initial CCR fugitive dust control plan, or any subsequent amendment of it, meets the requirements of this section.

I certify that this CCR Fugitive Dust Control Plan meets the requirements of 40 CFR §257.80(b).

Signature:

Name: Jay D. Mokotoff, P.E.

Title: Associate Vice President

Certification Date: <u>02/16/22</u>

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