Annual CCR Fugitive Dust Control Report

in support of

40 CFR Part 257

for Northern Indiana Public Service Company LLC's

Rollin M. Schahfer Generating Station

NIPSCO

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Introduction

The rule titled "Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities" (hereinafter the "CCR Rule") was published as a final rule in the *Federal Register* on April 17, 2015 [80 FR 21302] and codified at 40 CFR 257 Subpart D.

Northern Indiana Public Service Company LLC (NIPSCO) is the owner and operator of Rollin M. Schahfer Generating Station (RMSGS) located in Jasper County near Wheatfield, Indiana. There are four coal-fired electric utility steam generating units at RMSGS:

- Unit 14 is a cyclone coal-fired boiler with a design heat input capacity of 4,650 million British thermal units per hour (MMBtu/hr),
- Unit 15 is a pulverized coal-fired boiler with a design heat input capacity of 5,100 MMBtu/hr,
- Unit 17 is a pulverized coal-fired boiler with a design heat input capacity of 3,967 MMBtu/hr, and
- Unit 18 is a pulverized coal-fired boiler with a design heat input capacity of 3,967 MMBtu/hr.

Per 40 CFR 257.80(a), the owner or operator of a coal combustion residuals (CCR) landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must adopt measures that will effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units, roads, and other CCR management and material handling activities. These measures are contained in the CCR Fugitive Dust Control Plan for RMSGS that was timely placed in NIPSCO's operating record.

Furthermore, 40 CFR 257.80(c) requires the owner or operator of the CCR unit to prepare an annual CCR fugitive dust control report. This document constitutes the annual CCR fugitive dust control report for RMSGS.

Requirement 1 – Actions Taken to Control CCR Fugitive Dust

"The owner or operator of a CCR unit must 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."

[40 CFR §257.80(c)]

The following actions were taken to control CCR Fugitive Dust, in accordance with the CCR Fugitive Dust Control Plan for RMSGS.

Fly Ash

Fly ash produced from Units 14, 15, 17 and 18 is pneumatically conveyed to storage silos at the plant equipped with cyclone separators, collector bag filters, and bin vent bag filters. Dry fly ash is then unloaded from the silos into pneumatic trucks where fugitive dust emissions are controlled by use of a telescopic chute with a vacuum system that returns fugitive fly ash dust to the silo. A bin vent filter on each silo controls emissions resulting from the vacuum return process.

Fly ash in pneumatic trucks is either transported to the onsite fly ash conditioning facility or trucked offsite and sold. Trucks with fly ash to be conditioned deliver the ash to a pneumatic truck unloading station located at the fly ash conditioning facility. This unloading station also receives fly ash and dry flue gas desulfurization (FGD) residue from NIPSCO's Michigan City Generating Station. The pneumatic unloading system transfers fly ash and FGD residue to storage silos at the fly ash conditioning facility. CCR dust emissions from the pneumatic truck unloading system and transfer to the storage silos are controlled by a baghouse.

In addition to delivery with pneumatic trucks, fly ash from Units 17 and 18 can be transported from those units directly to the storage silos at the onsite fly ash conditioning facility via an enclosed pneumatic conveyor system. CCR dust emissions from this process are controlled by a baghouse.

At the fly ash conditioning facility, fly ash and FGD residue are transferred from the storage silos to pugmills to be conditioned with water or on-site landfill leachate, in accordance with the current landfill permit. The CCR dust emissions from this transfer are minimized by equipment enclosure, moisture addition, and a dust collection system with wet collectors.

After the fly ash and FGD residue have been conditioned in the pugmills, the material is stacked out to a temporary pile on a containerized surface via a radial conveyor system. Any CCR dust emissions from the temporary pile and the transfer are minimized by the moisture present in the conditioned fly ash and FGD residue. The conditioned material is then loaded into haul trucks for transportation and disposal in an onsite landfill. If reconditioning is necessary, water trucks or berm sprays can be utilized to minimize any dusting that may be present. Any CCR dust from these transfers continues to be controlled by the moisture present in the conditioned material.

Bottom Ash

Bottom ash produced from Units 17 and 18 is sluiced to a surface impoundment. Due to the nature of bottom ash and the wet sluicing process, there are not CCR fugitive dust concerns from this process.

Bottom ash produced from Unit 15 is sluiced to an indoor submerged flight conveyor system and subsequently stored in an adjacent enclosed containment. The material is then placed in the onsite landfill.

Slag

The slag produced from Unit 14 is wet sluiced to an indoor submerged flight conveyor system and subsequently stored in an adjacent enclosed containment until reclaimed. Due to the nature of slag and the wet sluicing process, there are not CCR fugitive dust concerns from this process. The material is then sold for beneficial reuse or placed in the onsite landfill.

Gypsum

Synthetic gypsum is produced from the wet FGD systems on Units 14, 15, 17 and 18. The operational nature of the wet FGD systems produces gypsum already containing moisture. The off specification gypsum is conveyed to a containerized surface and subsequently transferred by truck directly to the onsite landfill or another containerized surface. Wallboard quality synthetic gypsum is not subject to the CCR Rule.

Haul Roads

Water trucks were used to wet the haul roads to minimize the release of dust from transportation activities at the station. Road watering was suspended during periods of freezing conditions when watering would have been inadvisable for safety conditions (e.g., icy roads).

Requirement 2 – Record of Citizen Complaints

"The owner or operator of a CCR unit must prepare an annual CCR fugitive dust control report that includes… a record of all citizen complaints."

[40 CFR §257.80(c)]

NIPSCO has not received any citizen complaints regarding fugitive dust events at RMSGS as of November 22, 2019.

Requirement 3 – Corrective Measures

"The owner or operator of a CCR unit must prepare an annual CCR fugitive dust control report that includes… a summary of any corrective measures taken."

[40 CFR §257.80(c)]

There has not been a need for corrective measures, as NIPSCO has not identified any fugitive dust conditions that would require corrective measures or received any citizen complaints regarding fugitive dust at RMSGS as of November 22, 2019.