# CCR Fugitive Dust Control Plan

in support of

## 40 CFR Part 257

for Northern Indiana Public Service Company LLC's

## Michigan City Generating Station

(August 2019 Amendment)



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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]

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.

Furthermore, 40 CFR 257.80(b) requires the owner or operator of the CCR unit to prepare and operate in accordance with a CCR fugitive dust control plan as outlined in 40 CFR 257.80(b)(1) through (7).

Northern Indiana Public Service Company LLC (NIPSCO) is the owner and operator of the Michigan City Generating Station (MCGS) located in La Porte County in Michigan City, Indiana. There is one coal-fired electric utility steam generating unit at MCGS:

• Unit 12 is a cyclone coal-fired boiler with a design heat input capacity of 4,650 million British thermal units per hour (MMBtu/hr).

NIPSCO owns CCR surface impoundments at MCGS. The remainder of this document constitutes the requisite CCR fugitive dust control plan for MCGS.

## **Regulatory Text**

The requirements for the CCR fugitive dust control plan are found at 40 CFR 257.80(b)(1) through (7). The regulatory text of this section, as published on April 17, 2015, is presented below for ease of reference (as published in the *Federal Register* at 80 FR 21302).

- 40 CFR 257.80(b) CCR fugitive dust control plan. 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.
- (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 must 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 selected are applicable and appropriate for site conditions. Examples of control measures that may be appropriate include: Locating CCR inside an enclosure or partial enclosure; operating a water spray or fogging system; reducing fall distances at material drop points; using wind or vegetative covers; barriers, compaction, establishing and enforcing reduced vehicle speed limits; paving and sweeping roads; covering trucks transporting CCR; reducing or halting operations during high wind events; or applying a daily cover.
- (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.

- (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.
- (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.
- (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 after 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).
- (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, such as the construction and operation of a new CCR unit.
- (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.

## Requirement 1 - Identification and Description

"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 must 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 selected are applicable and appropriate for site conditions. Examples of control measures that may be appropriate include: Locating CCR inside an enclosure or partial enclosure; operating a water spray or fogging system; reducing fall distances at material drop points; using wind barriers, compaction, or vegetative covers; establishing and enforcing reduced vehicle speed limits; paving and sweeping roads; covering trucks transporting CCR; reducing or halting operations during high wind events; or applying a daily cover."

[40 CFR §257.80(b)(1)]

The following control measures are applicable and appropriate for site conditions based on observed performance of these measures during prior years of operation.

#### **Bottom Ash**

Bottom ash is not produced from Unit 12.

#### Slag

The slag produced from Unit 12 is wet sluiced to an indoor submerged flight conveyor system and subsequently stored in an adjacent indoor containment until reclaimed. Due to the nature of slag and the wet sluicing process, there are not CCR fugitive dust concerns from this process.

#### FGD Residue and Fly Ash

FGD residue and fly ash are pneumatically conveyed from the FGD baghouse to the existing fly ash silo and to the FGD waste silo. Each of these silos is equipped with a bin vent filter. FGD residue and fly ash is unloaded from the silo to trucks in a dry state, with fugitive dust emissions controlled by use of a telescopic chute with a vacuum system that returns fugitive fly ash dust to the silo. The bin vent filter on the silo controls emissions resulting from the vacuum return process. The truck loading stations for these silos contain interlock systems that require the overhead doors on the loading stations to be closed when the trucks are being loaded. The FGD residue and fly ash are then transported to NIPSCO's Rollin M. Schahfer Generating Station to be conditioned and landfilled.

#### Haul Roads and CCR Surface Impoundment Closures

Water trucks are used to wet the haul roads to minimize the release of dust from transportation activities at the station. Road watering is suspended during periods of freezing conditions when watering would be inadvisable for safety conditions (e.g., icy roads). Increased transportation activities related to the closures of CCR surface impoundments will be monitored for potential need for increased road watering and/or additional fugitive dust control methods, including but not limited to, the possible use of chemical dust suppression agents.

## Requirement 2 - Conditioned CCR in Landfill

"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."

[40 CFR §257.80(b)(2)]

CCR is not emplaced into a landfill at MCGS. All CCR generated at MCGS is hauled offsite to be conditioned and landfilled at NIPSCO's Rollin M. Schahfer Generating Station.

## Requirement 3 - Citizen Complaints

"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."

[40 CFR §257.80(b)(3)]

Citizen complaints involving CCR fugitive dust events at MCGS will be forwarded to the station environmental coordinator, who will document the complaints in a proper format to ensure necessary recordkeeping. Citizen complaints will be logged into the operating record.

## Requirement 4 - Effectiveness of Plan

"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."

[40 CFR §257.80(b)(4)]

The CCR fugitive dust control plan will be periodically reviewed to ensure it is effective at minimizing CCR fugitive dust from becoming airborne.

The station environmental coordinator will also conduct periodic visual observations of the various potential CCR fugitive dust sources identified in this plan. If any significant airborne fugitive dust is observed by the station environmental coordinator, corrective actions will be implemented as necessary to minimize fugitive dust. If fugitive dust observations become significantly recurring at a particular fugitive dust source location, additional control measures will be implemented, and this CCR Fugitive Dust Control Plan will be updated accordingly.

### Requirement 5 - Deadline for Initial Plan

"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 after 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)."

[40 CFR §257.80(b)(5)]

The initial CCR fugitive dust control plan was placed in the CCR operating record prior to October 19, 2015.

## Requirement 6 - Amending the Plan

"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, such as the construction and operation of a new CCR unit."

[40 CFR §257.80(b)(6)]

Any future amendments to this plan will be done in accordance with 40 CFR 257.80(b)(6) and will be tracked below in the Change Log.

#### CCR FUGITIVE DUST CONTROL PLAN CHANGE LOG

Date	Name and Title of Reviewer(s)	Update(s) Made
10/8/2015	Keith Weber, Environmental Coordinator 3 Ed Pierce, Environmental Coordinator 3	Initial plan created
	John Ross, Environmental Strategy Manager	
	Jeff Neumeier, Principal Environmental Compliance	
	Greg Costakis, Manager Environmental Compliance	
8/26/2019	Joe Kutch, CCR Program Manager	Boiler Slag submerged flight
	Keith Weber, Environmental Program Manager	conveyor addition, pond closures
	Ed Pierce, Principal Environmental Compliance	and minor grammatical changes
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## Requirement 7 - Professional Engineer Certification

"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."

[40 CFR §257.80(b)(7)]

PE10000155

This amended CCR fugitive dust control plan was certified by Edward D. Pierce, P.E., as evidenced below.

## **Professional Engineer Certification**

40 CFR 257.80(b)(7)

"I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR 257.80(b), attest that this CCR Fugitive Dust Control Plan has been prepared in accordance with good engineering practices. In preparation of the Plan, consideration of applicable industry standards has been accounted for along with procedures for required inspections and testing. The Plan is adequate for the facility. However, in no way does this certification relieve the owner or operator of a facility of his duty to fully implement the Plan."

Certifying Engineer: Edward D. Pierce, P.E.

Signature: Lhand 48 Date: 8/26/2019

Registration Number: PE10000155

State: Indiana