

# CCR Fugitive Dust Control Plan

in support of

## 40 CFR Part 257

for Northern Indiana Public Service Company LLC's

## Rollin M. Schahfer Generating Station

(November 2023 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 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 was a cyclone coal-fired boiler with a design heat input capacity of 4,650 million British thermal units per hour (MMBtu/hr),
- Unit 15 was 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.

NIPSCO owns and operates CCR landfills and surface impoundments at RMSGs. The remainder of this document constitutes the requisite CCR fugitive dust control plan for RMSGs. As of October 1, 2021, NIPSCO permanently retired both Unit 14 and Unit 15. Consequently, no additional CCR are being generated by those units.



## 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 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.

(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.

### Fly Ash

Fly ash produced from Units 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, and 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.

### **Slag**

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

### **Gypsum**

Synthetic gypsum is produced from the wet FGD systems on Units 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 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 at Bailly Generating Station and Rollin M. Schahfer Generating Station 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)]*

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With the exception of off-specification gypsum, all CCR emplaced into the landfill is conditioned with water or on-site landfill leachate via a pugmill system as described above in Requirement 1. As previously mentioned, the gypsum is already conditioned with moisture as part of its production process. These conditioning processes do not introduce sufficient moisture to produce free liquids.

Material from the closures of CCR surface impoundments will be appropriately conditioned prior to being placed into the landfill through methods employed during the material removal process at each individual surface impoundment.

## 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)]*

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Citizen complaints involving CCR fugitive dust events at RMSGS 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)]*

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The CCR fugitive dust control plan will be periodically reviewed to ensure it is effective at minimizing CCR fugitive dust from becoming airborne. Review methods will include a weekly Landfill Inspection Checklist to be performed by the station environmental coordinator (or other qualified person), which has a feature on the form to record observations of dust control at the active CCR landfill.

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)]*

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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 John Ross, Environmental Strategy Manager Jeff Neumeier, Principal Environmental Compliance Greg Costakis, Manager Environmental Compliance	Initial plan created
5/31/2018	Kevin Sokolowski, Environmental Coordinator 3 Ed Pierce, Principal Environmental Compliance Craig Myers, Environmental Compliance Manager Joe Kutch, CCR Program Manager	Added additional dust control options for conditioned ash at the ash conditioning facility
8/26/2019	Joe Kutch, CCR Program Manager Keith Weber, Environmental Program Manager Ed Pierce, Principal Environmental Compliance	Gypsum language, submerged flight conveyors addition, leachate use in pugmill, pond closures, and minor grammatical changes
11/8/2023	Joseph Kutch, Manager, Environmental Compliance Ariel Rozwara, Environmental Coordinator 2 Jeff Neumeier, Principal Environmental Compliance Ed Pierce, Environmental Principal	Unit 14 and 15 closures, grammatical changes, Michigan City Generating Station pond closures

## 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)]

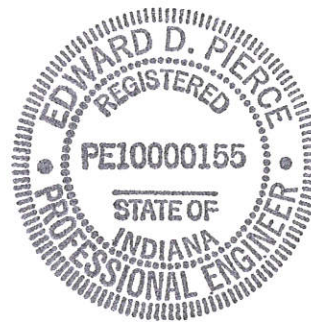
This amended CCR fugitive dust control plan was certified by Edward D. Pierce, P.E., as evidenced below.

### 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:** Edward D. Pierce

**Date:** 11/18/2023

Registration Number: PE10000155

State: Indiana