# CCR COMPLIANCE FUGITIVE DUST CONTROL PLAN

# Midwest Generation, LLC Joliet #29 Generating Station 1800 Channahon Road Joliet, Illinois

**PREPARED BY:** KPRG and Associates, Inc.

14665 W. Lisbon Road, Suite 1A Brookfield, Wisconsin 53005

September 8, 2023

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#### 1.0 INTRODUCTION

On April 17, 2015, the United States Environmental Protection Agency published a final rule regulating coal combustion residuals (CCR) as part of 40 CFR 257 (Federal CCR Rule). On April 15, 2021, the Illinois Environmental Protection Agency adopted 35 Ill. Adm. Code 845 (Illinois CCR Rule) creating state-wide standards for the disposal of CCR in surface impoundments, created by the generation of electricity by coal-fired power plants. 40 CFR 257 and 35 Ill. Adm. Code specifically require that "the owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit (landfill/surface impoundment), must adopt measures that will effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units (landfill/surface impoundments), roads, and other CCR management and material handling activities". As a result, each regulated facility must develop a CCR fugitive dust control plan that complies with 40 CFR 257.80 and 35 Ill. Adm. Code 845.500(b). It should be noted that 40 CFR 257 also regulates CCR landfills but 35 Ill. Adm. Code only regulates CCR surface impoundments.

This site specific CCR Fugitive Dust Control Plan (Plan) has been developed to comply with the requirements specified in both 40 CFR 257.80 and 35 Ill. Adm. Code 845.500. In general, the Plan identifies the potential CCR fugitive dust sources subject to the regulations and describes the control measures that will be implemented to minimize CCR fugitive dust emissions. The Plan also includes a procedure for the periodic assessment of the Plan's effectiveness, documentation of any Plan amendments deemed necessary to assure continued compliance, a record of any citizen complaints received pertaining to CCR fugitive dust emissions, and an outline of the required reporting and recordkeeping requirements in both regulations.

This Plan has been revised to combine the requirements for the Federal CCR Rule and Illinois CCR Rule into one plan.

#### 2.0 SITE INFORMATION

2.1 Owner/Operator and Address:

Midwest Generation, LLC Joliet #29 Generating Station 1800 Channahon Road Joliet, Illinois

2.2 Owner Representative/Responsible Person Contact Information:

Plant Manager 815-207-5412

2.3 Location and Description of Facility Operations

The Midwest Generation Joliet #29 Generating Station is located at 1800 Channahon Road, Joliet, Will County, Illinois. The facility is a retired natural gasfired electric power generating station (formerly coal-fired) situated on approximately 297 acres located on the north side of the Des Plaines River. There are two retired units, identified as Units 7 and 8, on the property. Electrical power was transmitted from the site to the area grid through overhead transmission power lines.

The general vicinity includes other commercial and industrial facilities, limited residential development and agricultural areas.

#### 3.0 POTENTIAL NON-CCR FUGITIVE DUST SOURCES

As a result of the recent fuel conversion, the correlated fact that all coal combustion ceased at the facility as of March 20, 2016, and Pond 2 was cleaned out during the summer of 2019, the remaining potential CCR fugitive dust sources have been removed from the facility. It is unlikely that CCR Fugitive dust could potentially be generated from the facility as a result of equipment malfunctions, wind erosion, housekeeping issues and/or the nature of the operation. As described below, there is no CCR remaining at Joliet 29 Station above de minimis quantities. The facility has the potential to generate non-CCR fugitive dust and those sources were further evaluated to determine the probability of non-CCR fugitive dust being generated and to determine the level of emission controls that are warranted to mitigate non-CCR fugitive dust emissions. The findings of the evaluation are individually discussed in the following sections.

#### 3.1 Pond 2

Since the facility has not burned coal since 2016, Pond 2 has not been used to store bottom ash and slag. Furthermore, Pond 2 has been cleaned of accumulated CCR and continues to be used for non-CCR wastewaters. Prior to the conversion, when the facility burned coal, Pond 2 was occasionally used to store bottom ash and slag when certain operational circumstances required it. In 2019, the cleaning of Pond 2 occurred in accordance with 40 CFR 257.102 of the Federal CCR Rule. The cleaning of Pond 2 required dredging to remove the prior deposited bottom ash and slag from the pond. When the cleaning occurred, Pond 2 was dewatered and the dredged material allowed to dry within the pond. When the material was suitable for transport, it was loaded into open top trucks, covered and sent off site to Lincoln Stone Quarry for disposal. The potential for CCR fugitive dust emissions were kept to a minimum during the cleaning event. Now that the cleaning of Pond 2 is complete, the potential for CCR fugitive dust is no longer present.

Gravel roads are present around the perimeter of Pond 2 and have the potential to generate non-CCR fugitive dust during dry weather conditions.

#### 3.2 Facility Roadways

During removal of the CCR, truck drivers are instructed on the proper procedure for cleaning trucks and a vehicle speed limit is enforced at the facility. Ash material that may not have been adequately removed from the trucks has the potential to become airborne and ultimately be deposited on haul roads. To minimize CCR fugitive dust emissions, the roads were assessed during impoundment cleaning activities, and any observed accumulated ash material was promptly cleaned up and collected for off-site removal to either Lincoln Stone Quarry or another off-site licensed disposal facility. No ash transport has occurred since 2019.

Both gravel covered and asphalt paved roads within the facility are used by trucks hauling equipment and vehicles transporting plant personnel. Non-CCR fugitive dust emissions could occur during transit if accumulated dust is present on the roadways during dry weather conditions.

These potential non-CCR fugitive dust sources are identified on the Site Diagram included in Appendix A.

#### 4.0 DESCRIPTION OF CONTROL MEASURES

#### 4.1 Purpose

The purpose of developing appropriate control measures is to minimize and reduce the emissions of CCR and non-CCR fugitive dust from the identified potential emission sources. The control measures and work practices implemented at the facility are described in the following sections.

#### 4.2 Pond 2

During the cleaning activities, Pond 2 was dewatered and the sediment removed to Lincoln Stone Quarry. Therefore, the potential for CCR fugitive dust emissions is no longer applicable. Periodically, Pond 2 is inspected by plant personnel to ensure its functional operation. During these inspections, the plant personnel may drive around the pond on the adjacent gravel roads and the potential for non-CCR fugitive dust emissions may occur during excessively dry and windy conditions. If excessive non-CCR fugitive dust emissions are observed, the speed of the vehicle will be minimized and a water truck may be used if needed.

#### 4.3 Ash Transport Roadways

Truck drivers are instructed on the proper procedure for cleaning trucks and a vehicle speed limit is enforced at the facility. To minimize non-CCR fugitive dust emissions, these roads will be assessed during station activities and any observed accumulated non-CCR material will be promptly cleaned up and collected for proper disposal.

#### 5.0 PLAN ASSESSMENTS/AMENDMENTS

To assure that the work practices being implemented during Pond 2 operations adequately control the dust from the identified potential non-CCR fugitive dust emission sources at the facility, routine assessments and record keeping will be performed. These procedures include the following:

#### 5.1 Non-CCR Fugitive Dust Assessments

Pursuant to 40 CFR 257.80(b)(4) and 35 III. Adm. Code 845.500(b)(3), assessments of the potential non-CCR fugitive dust emission sources identified within this Plan will be conducted to assess the effectiveness of this Plan. The assessment will include observation of site activities that involve significant vehicular traffic at the facility to confirm the adequacy of the control measures. The assessments will be conducted during excessive dry weather conditions by an individual designated by the contact identified in Section 2.2 of this Plan. Observations made during each assessment will be recorded on a form similar to the one included in Appendix B, however, the station may create their own form.

If the results of the assessment determine that the control measures are not adequate, the necessary response measures will be implemented. If the assessment finds that this Plan does not effectively minimize the non-CCR from becoming airborne, this Plan will be amended to include additional control measures.

#### 5.2 Plan Amendments

This non-CCR Fugitive Dust Plan will be reviewed whenever there is a change in conditions that would substantially affect the written Plan currently in place. A record of the reviews and any modifications or amendments made to the Plan currently in place will be kept on a form similar to the one included in Appendix C, however, the station may create their own form.. The amended Plan will be reviewed by a Registered Professional Engineer and, if deemed acceptable, will be recertified.

#### 5.3 Citizen Complaints

Any written or verbal complaints received from a citizen involving alleged non-CCR fugitive dust emission events at the facility will be recorded by an individual designated by the contact identified in Section 2.2 of this Plan. The complaints will be recorded on a form similar to the one included in Appendix D. Upon receipt of the complaint, an investigation of the alleged source of the non-CCR fugitive dust emissions will be performed and the results of that investigation recorded on the form. If the non-CCR fugitive dust emission event is confirmed, any necessary repairs or changes in operation required to mitigate the non-CCR fugitive dust emissions will be implemented as soon as practicable.

## 6.0 CCR FUGITIVE DUST PLAN REPORTING/RECORDKEEPING REQUIREMENTS

This section outlines the Plan reports that must be prepared and records that must be maintained to meet the requirements specified in the Federal and Illinois CCR Rules. These requirements include the following:

- Place the Plan in the facility's operating record and publicly accessible internet site. If the Plan is amended, replace the initial Plan with the amended Plan. Only the most recent amended Plan will be maintained in the facility's operating record and internet site.
- Prepare an annual CCR Fugitive Dust Control Report compliant with 40 CFR 257.80(c) and place it in the facility's operating record and post to the publicly accessible internet site. The annual report will include:
  - o A description of the actions taken to control CCR fugitive dust,
  - o A record of all citizen complaints, and
  - o A summary of any corrective measures taken.
- Prepare an annual CCR Fugitive Dust Control Report compliant with 35 Ill. Code 845.500(c), place it in the facility's operating record, and submit as part of the annual consolidated report required by Section 845.550. The annual report will be posted to the publicly accessible website and will include:
  - o A description of the actions taken to control CCR fugitive dust,
  - o A record of all citizen complaints, and
  - o A summary of any corrective measures taken.
- Provide notification to the IEPA and, if applicable, the Tribal authority when the Plan and reports are placed in the facility's operating record and publicly accessible internet site.
- Submit quarterly reports compliant with 35 Ill. Code 845.500(b)(2)(B) to IEPA within 14 days from the end of the quarter of all complaints received in that quarter. The quarterly reports will include:
  - o The date of the complaint,
  - o The date of the incident,
  - o The name and contact information of the complainant, and
  - o All actions taken to assess and resolve the complaint.

#### 7.0 PROFESSIONAL ENGINEER CERTIFICATION

The undersigned Registered Professional Engineer is familiar with the requirements of 40 CFR 257.80 and 35 Ill. Adm. Code 845.500 and has visited and examined the facility or has supervised examination of the facility by appropriately qualified personnel. The undersigned Registered Professional Engineer attests that this non-CCR Fugitive Dust Control Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards and meets the requirements of 40 CFR 257.80 and 35 Ill. Adm. Code 845.500, and that this Plan is adequate for the facility. This certification was prepared as required by 40 CFR 257.80(b)(7) and 35 Ill. Adm. Code 845.500(b)(7).

Engineer: Joshua D. Davenport

Signature:

Date: 9/8/2023

Company: KPRG and Associates, Inc.

Registration State: Illinois

Registration Number: 062.061945

License Expiration Date: November 30, 2023

Professional Engineer Stamp:

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## **APPENDIX A**

# SITE DIAGRAM POTENTIAL NON-CCR FUGITIVE DUST SOURCES



14665 West Lisbon Road, Suite 1A Brookfield, Wisconsin 53005 Telephone 262-781-0475 Facsimile 262-781-0478

414 Plaza Drive, Suite 106 Westmont, Illinois 60559 Telephone 630-325-1300 Facsimile 630-325-1593

Scale: 1" = 600' Date: August 10, 2023

APPENDIX A

KPRG Project No. 15315

APPROXIMATE SCALE

# APPENDIX B EXAMPLE ASSESSMENT RECORD

#### **APPENDIX B**

#### **JOLIET #29 STATION**

### **EXAMPLE ASSESSMENT RECORD**

Date	Inspector	Unit Inspected (See Key Below)	Maintenance/Cleanup Required (yes/no)	Response Action Performed (completion date)	Inspector Signature

Unit Key:

1 - Pond 2

2 - Roadways

# APPENDIX C EXAMPLE PLAN REVIEW AND AMENDMENT RECORD

#### **APPENDIX C**

#### **JOLIET #29 STATION**

## **EXAMPLE CCR PLAN REVIEW/AMENDMENT RECORD**

Date of Review	Reason for Review	Section Amended	P.E. Certification (Name/Date)
August 1, 2023	Combine federal & II state CCR dust plans, station has ceased operating	Sections 1.0 through 7.0	Josh Davenport, 8/2023

# APPENDIX D EXAMPLE CITIZEN COMPLAINT LOG

#### **APPENDIX D**

#### **JOLIET #29 STATION**

#### **EXAMPLE CITIZEN COMPLAINT LOG**

1	Citizen Information						
Date	Time	(Name, Address, Phone No., Email)	Summary of Complaint	Action Taken	Recorded By		
Date	Time	(Name, Address, Fnone No., Eman)	Summary or complaint	Action Taken	Recorded by		