

# Statement of Basis

For the Planned Issuance of a  
Revised Clean Air Act Permit Program (CAAPP) Permit And a  
Renewed Acid Permit for:

**City, Water Light & Power (CWLP)  
Dallman Generating Station  
3300 Stevenson Drive, Springfield**

Illinois EPA ID No. for the Source: 167120AAO  
Federal ORIS\* Code for the Source: 963  
CAAPP Permit No.: 95090091

Permitting Authority:  
Illinois Environmental Protection Agency  
Bureau of Air, Permit Section  
217/785-1705

June 2016

\* Office of Regulatory Information Systems (ORIS)

## **TABLE OF CONTENTS**

### PREFACE

### INTRODUCTION

#### CHAPTER 1 HISTORICAL AND LEGAL BACKGROUND TO THE PLANNED ACTION

- 1.1 Historical Background
- 1.2 Reopening of the CAAPP Permit
- 1.3 Other Revisions to the CAAPP Permit by Significant Modification
- 1.4 Parallel Permitting Actions
- 1.5 Changes to the Numbering of Conditions in the CAAPP Permit
- 1.6 Issuance of a Renewed Acid Rain Permit for the Dallman Station

#### CHAPTER 2 FACTUAL BASIS FOR THE PLANNED PERMIT ACTION

- 2.1 Description of the Source
- 2.2 Ambient Air Quality Status for the Area
- 2.3 Status of the Source under the CAAPP
- 2.4 Permitted Emissions for Purposes of Fees
- 2.5 Construction Permits
- 2.6 Applicable Regulatory Requirements

#### CHAPTER 3 PLANNED CHANGES TO THE CAAPP PERMIT THROUGH REOPENING

#### CHAPTER 4 PLANNED CHANGES TO THE CAAPP PERMIT THROUGH SIGNIFICANT MODIFICATION

- 4.1 Changes Related to the Dallman 4 Project
- 4.2 Discussion of CAM for the Dallman 4 Project
- 4.3 Other Planned Changes by Significant Modification

#### CHAPTER 5 PLANNED RENEWAL OF THE ACID RAIN PERMIT

#### CHAPTER 6 SUPPLEMENTAL INFORMATION

- 6.1 Summary of Emission Units and Significant Permit Requirements
- 6.2 Discussion of Reporting Required by CAAPP Permits
- 6.3 Discussions of Start-up and Malfunction/Breakdown
- 6.4 Incorporation by Reference
- 6.5 Periodic Monitoring

### ATTACHMENTS

- Attachment 1: Other Changes by Minor Modification
- Attachment 2: Other Changes by Administrative Amendment

## PREFACE

The purpose of this Statement of Basis is to discuss the development and legal basis for certain revisions to the Clean Air Act Permit Program (CAAPP)<sup>1</sup> permit for the Dallman Generating Station (Dallman Station or Dallman) that are now planned. Certain revisions to this CAAPP permit for this source are planned through a reopening proceeding for emission units covered by the permit to address applicable requirements that are not addressed in the current CAAPP permit. This reopening proceeding and the resulting revisions to the CAAPP permit that are now planned would be the final step in the settlement of the previous permit appeal before the Illinois Pollution Control Board for the CAAPP permit that was initially issued by the Illinois EPA for this source. In addition, the Illinois EPA is planning changes to this CAAPP permit to address Dallman Boiler 4, a new coal-fired boiler constructed at the facility, and the new and modified equipment associated with this new boiler.<sup>2</sup> Revisions are also planned to certain provisions of the current CAAPP permit to reflect refinements made in the CAAPP permits for other coal-fired power plants in Illinois and to make other refinements now being requested by the Permittee.

This Statement of Basis also addresses the planned issuance of a renewed Acid Rain Program Permit for the Dallman Station. The renewed permit would address the four coal-fired electrical generating units that are now located at this facility. This revised Acid Rain Program permit would take the place of the Acid Rain Permit that is attached to the current CAAPP permit for the facility.

A Statement of Basis is a document that the Illinois EPA must prepare as part of the public comment period for the planned issuance, renewal or significant modification of a CAAPP permit. Statements of Basis are intended to aid the public in understanding the relevant facts and legal underpinnings of planned actions on CAAPP permits and the draft CAAPP permits that have been prepared by the Illinois EPA.<sup>3</sup> In this instance, this Statement of Basis addresses the planned changes to the CAAPP permit for the Dallman Station that are planned by the Illinois EPA pursuant to the reopening and other planned changes to the permit that would be significant modifications. The Illinois EPA must also prepare a Statement of Basis for a planned significant action on an Acid Rain Program permit.

This Statement of Basis is only explanatory in nature and is not enforceable. The Statement of Basis also does not shield the Permittee from enforcement actions or its responsibility to comply with existing or future applicable regulations. Nor does this Statement of Basis constitute a defense to a violation of the federal Clean Air Act, the Environmental Protection Act (Act) or implementing regulations thereunder.

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<sup>1</sup> The Clean Air Act Permit Program (CAAPP) is Illinois' operating permit program for sources of emissions pursuant to Title V of the federal Clean Air Act.

<sup>2</sup> The "Dallman 4 Project" was constructed pursuant to Construction Permit/PSD Approval 04000050. City, Water Light & Power (CWLP) submitted an application for a significant modification of this CAAPP permit to address this project on March 10, 2010.

<sup>3</sup> The Illinois EPA must prepare Statements of Basis pursuant to Section 39.5(8)(b) of Illinois' Environmental Protection Act (Act). Along with the draft permit prepared for a public comment period, the Illinois EPA must prepare "... a statement that sets forth the legal and factual basis for the Draft CAAPP permit conditions, including references to the applicable statutory or regulatory provisions." The Illinois EPA must also provide a copy of this statement to any person who requests it.

## INTRODUCTION

The Dallman Generating Station (Dallman Station) is a power plant that now has four coal-fired electrical generating units (EGU). The Dallman Station is a municipal power plant owned by the City of Springfield and operated by the city's utility department, City Water, Light and Power (CWLP). The initial Clean Air Act Permit Program (CAAPP) permit for the Dallman Station was issued in September 2005. The permit addressed the applicable emission standards and requirements that existed at the time this permit was issued. In a subsequent permit appeal to the Illinois Pollution Control Board, CWLP challenged the applicability of certain legal requirements and the imposition of certain requirements for emission testing, monitoring, recordkeeping and reporting in the CAAPP permit. Until the appeal was formally settled, the initial permit was stayed in its entirety. The presence of the stay, which was a consequence of the Illinois' administrative review process, prevented the issued permit from becoming final and effective. The first steps toward advancing the development of a complete CAAPP permit for the Dallman Station was to provide for the effectiveness of a CAAPP permit and resolve the permit appeal. These steps were completed on October 18, 2013, when a revised CAAPP permit was issued for the Dallman Station, and on November 21, 2013, when the Board granted the motion for dismissal of the appeal by the Permittee. The CAAPP permit for Dallman is now being brought up-to-date by the Illinois EPA through a permit reopening proceeding and by significant modifications to the permit. The permit reopening proceeding would address new applicable requirements for emission units covered by the permit, which requirements have become applicable to these units since the initial CAAPP permit was issued in 2005. The significant modifications to the permit would address a new coal-fired boiler installed at the facility, Dallman Boiler 4, and ancillary equipment for this new boiler. The significant modifications would also involve other planned revisions to certain provisions of the CAAPP permit to reflect refinements made in the CAAPP permits for other coal-fired power plants in Illinois and to make other refinements now being sought by CWLP.

This Statement of Basis supports the revisions to the CAAPP permit for the Dallman Station that are now planned by the Illinois EPA and for which a public comment period is required before any such revisions are made. Chapter 1 of this Statement of Basis provides historical background for the planned permit revisions. Chapter 2 provides the factual basis for the planned permit actions. Chapter 3 provides a narrative discussion for changes planned as part of the reopening. Chapter 4 changes planned as part of a significant modification of the permit. Chapter 5 discusses the planned renewal of the Acid Rain Permit for the Dallman Station. Chapter 6 provides general background on the emission units at the Dallman Station and certain elements of CAAPP permits.

## **CHAPTER 1 – HISTORICAL AND LEGAL BACKGROUND TO THE PLANNED ACTION**

### **1.1 Historical Background**

The City of Springfield owns and operates a coal-fired power plant for the generation of electricity known as the Dallman Generating Station (Dallman Station). The Dallman Station is located at 3100 Stevenson Drive in Springfield. In addition to coal-fired boilers, this station has ancillary equipment and operations for coal handling, coal processing, limestone/gypsum handling, bulk material handling/processing/storage, a cooling tower, emergency diesel engines, gasoline storage and roadways and parking areas.<sup>4</sup>

The City of Springfield initially filed an application with the Illinois EPA on September 7, 1995 for a CAAPP permit the Dallman Generating Station. Following a public comment period that included a public hearing and review of the proposed CAAPP permit by USEPA, the Illinois EPA issued a CAAPP permit for this source on September 29, 2005.<sup>5</sup>

On November 3, 2005, the Permittee petitioned the Illinois Pollution Control Board (Board) for review of the CAAPP permit issued by the Illinois EPA for Dallman. In particular, the Permittee challenged the inclusion of certain specific terms and conditions in this permit, as identified in the petition. The Permittee requested that the Board reverse and remand the permit to the Illinois EPA specifically for the purpose of removing egregious conditions or revising the permit as requested in the petition. The Permittee further requested that the Board recognize that the "issued" CAAPP Permit was not final and effective, pending a final decision from the Board, with issuance of an order staying the permit as a whole. On November 17, 2005, the Board accepted the Permittee's appeal petition and on February 16, 2006, the Board granted a stay of the issued CAAPP permit in its entirety as a matter of law.

The parties engaged in negotiations, which ultimately resulted in settlement. The Illinois EPA prepared a draft of a revised CAAPP permit that reflected the changes to the permit agreed to in settlement discussions and took the steps needed to process the draft revised permit. On May 16, 2013, the Board granted a joint motion to lift the stay of uncontested conditions allowing the initial permit to go into effect, but with contested conditions remaining stayed. On October 18, 2013, the Illinois EPA issued a final and effective CAAPP permit for Dallman that reflected the negotiated settlement of the appeal of the initial permit.

### **1.2 Reopening of the CAAPP Permit**

In conjunction with the issuance of the current CAAPP permit, the Illinois EPA initiated CAAPP procedures for reopening, as authorized by Section 39.5(15)(a)(i) of the Act and in accordance with 35 IAC Part 270. The Illinois EPA began the reopening process on May 17, 2013 when it notified CWLP the it would be reopening the CAAPP permit. The purpose of this reopening proceeding is to address additional CAA applicable requirements to the CAAPP permit, i.e.,

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<sup>4</sup> CWLP also provides the municipal water supply for residents of Springfield and certain other nearby municipalities. CWLP's water purification plant is also located at 3100 Stevenson Drive in Springfield.

<sup>5</sup> The expiration date specified on the face of the CAAPP permit was September 29, 2010, providing the permit with the five-year term required by the CAAPP.

requirements under the Clean Air Act that have become applicable to the source since the original permit issuance in September of 2005.

As provided by Section 39.5(15)(c) the Act, reopening proceedings for a CAAPP permit must adhere to the "same procedures" that apply to the initial issuance of a CAAPP permit. These procedures include the preparation of a draft CAAPP permit accompanied with a Statement of Basis and opportunity for public comment followed by review by USEPA<sup>6</sup>.

As mentioned above, the planned revisions to the CAAPP permit have resulted in the preparation of a draft permit and this accompanying State of Basis. Certain planned revisions identified in Chapter 3 and 4 below are being subjected to public participation and will then undergo review by USEPA in accordance with Sections 39.5(8)(a) and (9) of the Act.

### **1.3 Other Revisions to the CAAPP Permit by Significant Modification**

The significant modifications to the permit would address a new coal-fired boiler installed at the facility, Dallman Boiler 4, and ancillary equipment for this new boiler. The significant modifications would also involve other planned revisions to certain provisions of the CAAPP permit to reflect refinements made in the CAAPP permits for other coal-fired power plants in Illinois and to make other refinements now being sought by CWLP. The Illinois EPA has determined that it is appropriate to make these revisions to the CAAPP permit requested by the Permittee, as discussed in detail in Chapter 4 of this document.

These revisions would be made using the procedures for significant modification as they potentially involve significant changes in existing monitoring permit terms or conditions, or relaxation of reporting or recordkeeping requirements and do not qualify as either minor permit modifications or as administrative permit amendments. As provided by Section 39.5(14)(c)(iii) of the Act, proceedings for significant permit modifications must meet the same requirements that apply to initial issuance or renewal of a CAAPP permit, including public participation, review by affected States, and review by USEPA.

### **1.4 Parallel CAAPP Permitting Actions**

In addition to the planned revisions to the CAAPP permit for the Dallman Station discussed above, the Illinois EPA is planning to make certain other revisions to the current CAAPP permit through the procedures for minor modifications and administrative amendment.

The additional revisions that will be addressed using the procedures for minor modification involve a variety of changes, including, among other things, those that do not cause significant changes to existing monitoring, reporting or recordkeeping, as provided for by Section 39.5(14)(a)(i)(B) of the Act. For permit revisions meeting the criteria for minor modification, the Illinois EPA is required to review the revisions using the CAAPP's

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<sup>6</sup> The reopening of a CAAPP permit does not provide for a comprehensive review of the all the terms and conditions of the permit, as would occur for an initial or renewed CAAPP permit, but instead only provides for review of those parts of the permit affected by the reopening.

procedures for minor modifications. The revisions that will be made using the minor modification process are described in Attachment 1 of this Statement of Basis. The CAAPP does not provide for public participation on planned minor modifications of CAAPP permits. USEPA will be afforded a 45-day review period to comment on the proposed modifications, as provided for by Section 39.5(14) (a) (v) of the Act.

For permit revisions meeting the criteria for administrative amendment, the Illinois EPA is required to address the revisions using the procedures for administrative amendment of CAAPP permits. The revisions that will be made to the CAAPP permit using the procedures for administrative amendment are described in Attachment 2 of this Statement of Basis. The CAAPP does not provide for public participation on planned administrative amendments. A copy of the amended permit will be submitted to the USEPA following revision, as required by Section 39.5(13) (b) of the Act.

### **1.5 Changes to the Numbering of Conditions in the CAAPP Permit**

The planned revisions to CAAPP permit would entail renumbering of a number of conditions of the permit. In this Statement of Basis, as the numbering of certain permit conditions would change with the planned revisions, those conditions are generally referred to using the new numbering of conditions, as laid out in the draft of the planned revised CAAPP permit. As the planned revisions would remove certain conditions from the CAAPP permit, those conditions are referred to as "current conditions," using the numbering in the current CAAPP permit.

The renumbering of conditions of the CAAPP permit that would result from the planned revisions to the CAAPP permit will also necessitate certain revisions to internal cross-references in the permit. These revisions to internal cross-references in the permit due to addition or removal of conditions would be made. Only a few of these changes are individually identified in this Statement of Basis.

### **1.6 Issuance of a Renewed Acid Rain Permit for the Dallman Station**

Under the federal Acid Rain Program, the Permittee has applied for a renewed Acid Rain Permit for the Dallman Station. The purpose of the Acid Rain Program, which was established by Title IV of the Clean Air Act, is to achieve significant reductions in emissions of sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) from fossil-fuel fired electrical generating units as related to the contribution of these emissions to acid rain. To achieve this objective for coal-fired power plants, the program employs a market-based approach to reduce SO<sub>2</sub> emissions and traditional emission standards for NO<sub>x</sub> emissions.

The Illinois EPA has determined that it is appropriate to issue a renewed Acid Rain Program Permit for the Dallman Station, as discussed further in Chapter 5 of this document. The issuance of this revised Acid Rain Permit must also be subject to public participation and then undergo review by USEPA. In addition, the revised Acid Rain Permit would take the place of the Acid Rain Permit that is included as Attachment 3 of the current CAAPP permit for Dallman, also contributing to bringing the CAAPP Permit for Dallman up to date. Accordingly, the Illinois EPA is processing the draft of this renewed

Acid Rain Program Permit at the same time as other planned revisions to the CAAPP permit pursuant to the reopening proceeding.

**CHAPTER 2 – FACTUAL BASIS FOR THE PLANNED PERMIT ACTION**

**2.1 Description of the Source**

At the Dallman Station, the City of Springfield/City Water, Light and Power (CWLP), operates four coal-fired boilers to generate electrical power.<sup>7</sup> The source is located at 3100 Stevenson Drive in Springfield. The area in which the source is located has been identified as posing a potential concern for consideration of Environmental Justice.

SIC Code: 4911  
 County: Sangamon

The revised CAAPP permit for the Dallman Station planned by the Illinois EPA would address the following emission units and operations at the facility.

Emission Unit(s)	Description	Emission Control Measures/Equipment	Sect. *
Insignificant Activities (addressed by Section 3 of the CAAPP permit)			
Dallman Boiler 31	Babcock and Wilcox Boiler	Individual ESPs and SCRs, with shared FGD	7.1
Dallman Boiler 32	Babcock and Wilcox Boiler		
Dallman Boiler 33	Combustion Engineering Boiler	SCR, ESP and FGD	7.2
Dallman Boiler 4	Babcock and Wilcox Boiler	Low-NO <sub>x</sub> Combustion, SCR, Baghouse, Wet FGD & Wet ESP	7.3
"Existing" Coal Handling	Coal Receiving, Transfer and Storage Operations	Enclosure, Covers & Dust Suppressant Application	7.4
"Existing" Crusher	Coal Crushing Operation	Enclosures, Covers, Dust Suppressant Application & Control Devices	7.5
"Existing" Limestone and Gypsum Handling	Receiving, Transfer, Storage and Loadout Operation	Enclosures and Control Devices	7.6
"New/Modified" Material Handling, Processing and Storage **	Receiving, Processing, Transfer & Storage of Bulk Material (coal, limestone fly ash and gypsum) Associated with Boiler 4	Enclosure, Covers, Dust Suppressant Application & Control Devices	7.7
Cooling Tower	Cooling Tower for Boiler 4	Drift Eliminators	7.8
Engine Generators	Three Emergency Diesel Fired Engine-Generators	None	7.9
Emergency Fire Pump Engine	Emergency Diesel for the Fire Protection System	None	7.10
Gasoline Tank	Gasoline Storage Tank Capacity 500 Gallon	Submerged Loading Pipe	7.11
Roadways and Other Open Area Sources of Fugitive Dust	Roadways and Other Open Area Sources of Fugitive Dust	Pavement, Flushing, Vacuuming & Dust Suppressant Application	7.12

\* Unit-specific section in the revised CAAPP Permit.

\*\* The "new and modified" operations are part of the Dallman 4 Project, as addressed by Construction Permit/PSD Approval 04110050. The "existing" operations pre-dated that project and were not modified as part of that project.

<sup>7</sup> The revised CAAPP permit would no longer address two coal-fired boilers, Lakeside Units 7 and 8, and their associated ancillary operations, which were permanently shut down after 2005, when the initial CAAPP permit was issued.

## 2.2 Ambient Air Quality Status for the Area

The source is located in an area that is currently designated attainment or unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants, including PM<sub>2.5</sub>, PM<sub>10</sub>, nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), ozone and lead. (See 40 CFR Part 81, Designation of Areas for Air Quality Planning Purposes.)

## 2.3 Major Source Status

The Dallman Station requires a CAAPP permit because it is a major source for emissions of the following regulated pollutants: particulate matter (PM), nitrogen oxides (NO<sub>x</sub>), volatile organic material (VOM), CO, SO<sub>2</sub> and hazardous air pollutants (HAP).

The Dallman Station also requires a CAAPP Permit as an "affected source" for the purposes of Acid Deposition Control, Title IV of the Clean Air Act, pursuant to 40 CFR 70.3(a)(4).

The actual annual emissions of regulated pollutants from the Dallman Station, as reported by CWLP in Annual Emission Reports submitted to the Illinois EPA, are provided below:

Pollutant	Reported Emissions (tons/year)			
	2015	2014	2013	2012
CO	886.30	927.69	1,015.95	225.70
NO <sub>x</sub>	822.50	1,099.00	1,004.60	773.60
PM	127.76	125.97	304.56	561.30
SO <sub>2</sub>	820.90	1,203.70	1,174.50	1,103.70
VOM	24.97	31.11	30.34	25.46
CO <sub>2</sub>	2,395,119	2,839,146	2,836,179	2,418,429
Mercury	0.010	0.011	0.012	0.018
Hydrogen Chloride	0.69	11.32	0.91	0.76
Hydrogen Fluoride	1.39	3.59	0.41	0.34

## 2.4 Permitted Emissions for Purposes of Fees

A schedule limiting the source's annual emissions is not included in the permit for the purpose of fees under the CAAPP. For this source, CWLP currently pays the maximum annual fee for a source under the CAAPP.

## 2.5 Construction Permits

Conditions that have their origin in a construction permit are also identified in CAAPP permits to denote them as being carried over from an earlier construction permit into a new or renewed CAAPP Permit as "T1" conditions (i.e., Title I conditions). Because the underlying authority for provisions in construction permits comes from Title I of the CAA and their initial establishment in Title I Permits, the effectiveness of T1 Conditions derives from Title I of the CAA rather than linked to Title V of the CAA.

The construction permits listed below, issued prior to September 29, 2005, were reviewed and addressed during the development of the initial CAAPP permit for

Dallman Station. Applicable conditions that originated from these construction permits were incorporated into this current CAAPP permit.

Permit No.	Date Issued*	Subject
73010660	July 2, 2003	Dallman Unit 1 & ESP
73010661	July 3, 2003	Dallman Unit 2 & ESP
73010662	February 25, 1994	Coal Handling and Processing Equipment
73010663	July 24, 1995	Coal Handling Equipment
78010056	August 27, 2002	Dallman Unit 33
99030076	August 13, 2001	FGD System
01070019	December 17, 2001	Diesel Generators
01090010	December 4, 2001	SCR installation

\* Date issued or last revised.

The construction permits listed below, which were issued after September 29, 2005 when the initial CAAPP permit was issued, were reviewed during the development of this draft of the revised CAAPP permit for Dallman. Applicable conditions that originated in these construction permits are incorporated in the draft of the revised permit. In addition, since new emission units have been added at Dallman, applicable emission standards for these units would be addressed also in the revised permit (see Section 2.6 below).

Permit No.	Date Issued*	Subject
04110050	February 28, 2011	Dallman 4 Project
09090046	June 23, 2011	Emission Reduction Program for Visibility Impairment
15040039	May 20, 2015	Natural Gas Auxiliary Burner Conversion for Boilers 31, 32 and 33

\* Date issued or last revised.

The following table identifies construction permits that are now obsolete as equipment covered by such permit was never constructed or has been permanently removed from service.

Permit No.	Reason	Subject
93030110	Never Constructed	CE IGCC Project
07120014	Removed from service	Oil Fired Emergency Heating Boiler 1

## 2.6 Applicable Regulatory Requirements

The Dallman Station is subject to a variety of federal and state emission standards and emission control requirements, which are the legal basis for the conditions in this CAAPP permit that limit emissions. The CAAPP permit itself also identifies the legal basis for additional requirements as the specific statutory provisions from 39.5 of the Act such as periodic monitoring, reporting and other conditions necessary to achieve the purposes of the Act.

The requirements of the following regulations are addressed in the current CAAPP permit:

<b>Existing Regulatory Requirements</b>
Federal Requirements
40 CFR Part 60 Subparts A, Da and IIII
40 CFR Part 63 Subparts A and ZZZZ
40 CFR Parts 72 through 77 - Acid Rain Program
40 CFR Part 82 Subpart F - Ozone Depleting Substances
State Requirements
35 IAC Part 212 - Visible And Particulate Matter Emissions
35 IAC Part 214 - Sulfur Limitations
35 IAC Part 215 - Organic Material Emission Standards And Limitations
35 IAC Part 216 - Carbon Monoxide Emissions
35 IAC Part 225 - Control of Emissions Form Large Combustion Sources
35 IAC Part 244 - Episodes
35 IAC Part 254 - Annual Emissions Report

The following regulations have been identified as needing to be addressed in the reopening proceeding and are addressed in the draft of the revised CAAPP permit:

<b>Additional Regulatory Requirements</b>
Best Available Retrofit Technology (BART)
Illinois Mercury Rule (35 IAC Part 225)
Mercury and Air Toxics Standards (MATS) - 40 CFR 63 Subpart UUUUU
Cross-State Air Pollution Rule (CSAPR) - 40 CFR Part 97
35 IAC Part 212 - Process weight rate rule for certain material handling

## **CHAPTER 3 – PLANNED CHANGES TO THE CAAPP PERMIT THROUGH REOPENING**

### **Introduction**

The changes described below are planned to be made through the reopening proceeding for the CAAPP permit for the Dallman Station. Pursuant to Section 39.5(14)(c) of the Act, "Proceedings regarding a reopened CAAPP permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists.

### **Changes in Section 1.0 of the Permit: Introduction**

#### Condition 1.4

This condition would be revised to no longer address Lakeside Boilers 7 and 8 because these boilers have been permanently removed from service. There are now only four coal-fired boilers at the Dallman Station, existing Boilers 31, 32 and 33 and new Boiler 4.

#### Condition 1.5

This condition would be revised to explain that conditions in the revised CAAPP permit that set forth requirements for Best Available Control Technology (BACT) established in Constriction Permit/PSD Approval 04110050 would be designated as "BACT" conditions. This is because these conditions reflect requirements established in a PSD approval issued pursuant to Part C of Title I of the CAA, Prevention of Significant Deterioration of Air Quality, and regulations thereunder, and Section 9.1(d) of the Act. The list of abbreviations and acronyms in Section 2.0 of the permit would also be revised to specifically define "BACT" for this permit.

### **Changes in Section 3.0 of the Permit: Insignificant Activities**

#### Condition 3.1.1

This condition would be revised to remove the auxiliary boiler from the list of activities determined to be insignificant pursuant to 35 IAC 201.210(a)(1) and 201.211. This is because this auxiliary boiler is no longer in service.

### **Changes in Section 5.0: Overall Source Conditions**

#### Condition 5.2.4

This condition would be updated since the Permittee is now subject to a Risk Management Plan for the Dallman Station. This is because of the addition of an ammonia storage tank for the selective catalytic reduction (SCR) systems.

#### Condition 5.9

This condition now requires the Permittee to provide certain information to the Illinois EPA in advance of, or contemporaneous with, this permit reopening to assist the Illinois EPA if the permit was not reopened prior to issuance of the current CAAPP permit. This requirement is now moot and this condition would be removed from the CAAPP permit.

### **Changes in Section 6.0: Conditions for Emissions Control Programs**

### **Current Condition 6.1: NO<sub>x</sub> Trading Program**

The current Section 6.1 would be removed from the permit because the NO<sub>x</sub> Trading Program addressed by 35 IAC 217 Subpart W has been made obsolete by the USEPA's adoption of the Cross State Air Pollution Rule (CSAPR). The requirements under the program expired in 2009.

### **Condition 6.1 - Acid Rain Program (former Section 6.2)**

The current Section 6.2 - Acid Rain Program, and all conditions within this section, would be re-numbered as Section 6.1 because the NO<sub>x</sub> Trading Program, formerly Section 6.1, would be removed from the permit.

#### Condition 6.1.1 (previous Condition 6.2.1)

This condition would be revised to reflect that Boilers 7 and 8 are no longer in-service and Boiler 4 is now operational.

#### Condition 6.1.2 (previous Condition 6.2.2)

The phrase "...with the ability for averaging among units..." would be added to this condition to clarify that averaging among units for the purpose of determining NO<sub>x</sub> emissions is allowed by the Acid Rain Permit.

#### Condition 6.1.3 (previous Condition 6.2.3)

This condition would be revised to require CWLP, upon request by the Illinois EPA, to provide the Illinois EPA with copies of the electronic data reports that it routinely submits to the USEPA.

#### Condition 6.1.4 (previous Condition 6.2.4)

This condition would be revised to identify the Acid Rain Permit would now be Attachment 3 to the permit.

### **New Section 6.2: Cross-State Air Pollution Rule**

On July 6, 2011, the USEPA finalized the rule known as the Cross-State Air Pollution Rule (CSAPR), which requires states to significantly improve air quality by reducing power plant emissions that contribute to ozone and/or fine particle pollution in other states<sup>8</sup>.

CSAPR requires a total of 28 eastern and Midwestern states to reduce annual SO<sub>2</sub> emissions, annual NO<sub>x</sub> emissions and/or ozone season NO<sub>x</sub> emissions to assist in attaining the 1997 ozone and fine particle and 2006 fine particle National Ambient Air Quality Standards (NAAQS). CSAPR took effect January 1, 2015 for SO<sub>2</sub> and annual NO<sub>x</sub>, and May 1, 2015 for ozone season NO<sub>x</sub>.

CSAPR includes several emissions trading programs that require affected EGUs to hold emission allowances sufficient to cover their emissions of nitrogen oxides (NO<sub>x</sub>) and/or sulfur dioxide (SO<sub>2</sub>) in each compliance period. For each trading program and compliance period, the rule establishes overall state "budgets" representing the maximum number of emission allowances that may be allocated to

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<sup>8</sup> The timing of CSAPR's implementation has been affected by a number of court actions. On December 30, 2011, CSAPR was stayed prior to implementation. On April 29, 2014, the U.S. Supreme Court issued an opinion reversing an August 21, 2012 D.C. Circuit decision that had vacated CSAPR. Following the remand of the case to the D.C. Circuit, USEPA requested that the court lift the CSAPR stay and toll the CSAPR compliance deadlines by three years. On October 23, 2014, the D.C. Circuit granted USEPA's request. Accordingly, CSAPR Phase 1 implementation begins in 2015, with Phase 2 beginning in 2017.

the group of affected EGUs in each covered state. Annual SO<sub>2</sub> allocations for the four affected EGUs (combined) at Dallman are 4,719 tons per year in 2015 and 2016 and 3,304 tons per year in 2017 through 2020. Annual NO<sub>x</sub> allocations for the two affected EGUs (combined) are 1,262 tons per year for the period of 2015 through 2020 and 570 tons per ozone season for the same period.<sup>9</sup>

The CSAPR requirements are discussed in detail in Section 6.2 of the permit. The language in the proposed permit would be based on the template provided in the guidance memorandum from USEPA, "Title V Permit Guidance and Template for the Cross-State Air Pollution Rule", dated May 13, 2015. The language reflects a number of enhancements to this section that were made in response to preliminary comments from USEPA.

### **New Section 6.3: Best Available Retrofit Technology (BART)**

Under the Clean Air Act, to reduce emissions of visibility impairing air pollutants, NO<sub>x</sub>, SO<sub>2</sub>, and particulate, certain stationary sources must be subject to a Best Available Retrofit Technology (BART) standard. BART is defined as an "emission limitation based on the degree of reduction available through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility" (40 CFR 51.301).

Construction Permit 09090046 was issued by Illinois EPA to CWLP on June 23, 2011 approving an emission control program for Dallman Boilers 31 and 32 that addresses the role of emissions from these boilers in visibility impairment and regional haze, as is required for the affected units by Section 169A of the federal Clean Air Act. Under the approved program, CWLP would reduce emissions of nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) from the affected units by enhancing the operation of the existing SCR system and flue gas desulfurization equipment on the boilers. Boilers 31 and 32 are now subject to stringent annual limits that represent application of Best Available Retrofit Technology (BART) for the NO<sub>x</sub> and SO<sub>2</sub> emission rates of these units.

Lakeside Boilers 7 and 8 were also addressed by Construction Permit 09090046. However, these boilers were permanently shut down in 2009 so would not be addressed in the revised CAAPP permit.

Emission Reduction Requirements for the BART affected Boilers 31 and 32 are as follows:

- a. NO<sub>x</sub> Emission Reduction Requirements:
  - i. In the years 2015 and 2016, the annual average NO<sub>x</sub> emission rate of the BART affected Dallman units, combined, on a calendar year basis, shall not exceed 0.12 pounds per mmBtu.
  - ii. Commencing January 1, 2017 and continuing thereafter, the annual average NO<sub>x</sub> emission rate of the BART affected Dallman units, combined, on a calendar year basis, shall not exceed 0.11 pounds per mmBtu.

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<sup>9</sup> Allocations are from Technical Information and Support Document on USEPA website titled "Unit Level Allocations Under the CSAPR FIPs After Tolling" ([http://www3.epa.gov/crossstaterule/pdfs/UnitLevelAllocations\\_Tolled.xls](http://www3.epa.gov/crossstaterule/pdfs/UnitLevelAllocations_Tolled.xls))

- b. SO<sub>2</sub> Emission Reduction Requirements:
- i. In the years 2015 and 2016, the annual average SO<sub>2</sub> emission rate of the affected Dallman units, combined, on a calendar year basis, shall not exceed 0.25 pounds per mmBtu.
  - ii. Commencing January 1, 2017 and continuing thereafter, the annual average SO<sub>2</sub> emission rate of the affected Dallman units, combined, on a calendar year basis, shall not exceed 0.23 pounds per mmBtu.

These emission reduction requirements would be added to the CAAPP permit in Condition 6.3.2(a) and (b). Additionally, the compliance methodology for verifying compliance with these limits was also addressed in Construction Permit 09090046 and would be included in Condition 6.3.2(c) of the revised CAAPP permit.

Reporting requirement from Construction Permit 09090046 would be included in Condition 6.3.3(a) of the revised CAAPP permit.

#### **New Section 6.4: Illinois Mercury Rule**

To address mercury emissions from EGUs, Illinois adopted Part 225 of Illinois's air pollution regulations, entitled "Control of Emissions from Large Combustion Sources." In this rule, Illinois offered affected utilities two options, one of which imposes stringent limits on mercury emissions alone and the other of which mandates implementation of specific mercury control technology in conjunction with satisfaction of stringent emission limits for SO<sub>2</sub> and NO<sub>x</sub>.

The boilers at Dallman Generating Station are affected EGU subject to the requirements of 35 IAC 225 Subpart B - Control of Mercury Emissions from Coal-Fired Electric Generating Unit. CWLP has chosen to comply with the mercury emission standard in 35 IAC 225.230(a)(1)(A) of 0.0080 lb mercury/GWh gross electrical output and must at this time also comply with the applicable monitoring, reporting and recordkeeping requirements in 35 IAC 225.240 through 225.290 and Sections 1.14 through 1.18 of Appendix B to 35 IAC 225. The specific requirements applicable to Dallman Generating Station are delineated in the Conditions in Sections 6.4 of the permit.

Dallman Generating Station currently use Sorbent Trap Monitoring Systems instead of mercury CEMS which are excepted monitoring systems as defined in 35 IAC 225.130.

#### **New Section 6.5: Mercury and Air Toxics Rule (MATS)**

On December 16, 2011, the USEPA adopted the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Coal- and Oil-Fired Electric Utility Steam Generating Units, 40 CFR 63 Subpart UUUUU, to reduce emissions of hazardous air pollutants from power plants. Specifically, these NESHAP rules, more commonly referred to as the mercury and air toxics standards (MATS) for power plants, address HAP emissions from new and existing coal and oil-fired electric utility steam generating units (EGUs). The final rule was effective on April 16, 2012 and allowed existing sources three years to comply with the rule, resulting in an initial compliance date of April 16, 2015.

MATS addresses emissions of heavy metals, including mercury (Hg), arsenic (As), chromium (Cr), and nickel (Ni); and acid gases, including hydrochloric acid (HCl) and hydrofluoric acid (HF). MATS applies to EGUs larger than 25 MW that

burn coal or oil for the purpose of generating electricity for sale and distribution through the national electric grid to the public. For existing coal-fired EGUs, the rule establishes numerical emission limits for mercury, non-mercury HAP metals, and HCl (a surrogate for all toxic acid gases).

The rule establishes alternative numeric emission standards, including SO<sub>2</sub> (as an alternate to HCl), individual non-mercury HAP metals (as an alternate to PM), and total non-mercury metal air toxics (as an alternate to PM). The standards set work practices, instead of numerical limits, to limit emissions of organic air toxics, including dioxin/furan, from existing and new coal- and oil-fired power plants. A triennial performance test program is required for each unit, including inspection, adjustment, and/or maintenance and repairs to ensure efficient combustion.

CWLP has chosen the following approaches to comply with requirements of the MATS Rule:

- **Non-Mercury HAP Metals:** Compliance with the PM limit of 0.030 lb/mmBtu. The source is demonstrating compliance with quarterly emissions testing (The source has not chosen to use a continuous particulate matter monitoring system.). Pursuant to the MATS Rule, the source may qualify for low emitting EGU (LEE) status for filterable PM if performance test emissions results are less than 50 percent of the applicable emissions limits for all required testing for three consecutive years. If LEE status is achieved, the source will be required to conduct performance testing once every three years.
- **Acid Gases:** Compliance with an SO<sub>2</sub> limit of 0.20 lb/mmBtu, as a 30-boiler operating day rolling average. Pursuant to the MATS Rule, the source is allowed this method since the affected EGUs are equipped with a flue gas desulfurization system and an SO<sub>2</sub> continuous emission monitoring system (CEMS). With this option, quarterly testing for HCl emissions is not required.
- **Mercury:** Compliance with a limit of 0.013 lb/GWh, as a 30-boiler operating day rolling average for individual EGUs, or 0.011 lb/GWh, as a 90-boiler operating day rolling average if using emissions averaging consisting of more than one affected boiler. Pursuant to the MATS Rule, the source is using a mercury sorbent trap monitoring system to demonstrate compliance with the standard.
- **Work Practices:** Conducting tune-ups of the boiler burner and combustion controls at least every 36 calendar months. The source shall comply with the control device operation, fuel usage, monitoring, recordkeeping, and reporting requirements specified in Items 3 and 4 of Table 3 of 40 CFR Part 63 Subpart UUUUU during startup periods and shutdown periods of the affected EGUs. For this purpose, the source has elected to use the first definition of startup in 40 CFR 63.10042.<sup>10</sup>

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<sup>10</sup> This definition provides that a startup is "Either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on-site use). Any fraction of an hour in which startup occurs constitutes a full hour of startup."

## MATS Initial Compliance Demonstrations

As required by the MATS Rule, the source has conducted all required initial performance testing, boiler tune-ups and notifications. All emissions testing demonstrated compliance with the applicable emissions limits. The source has submitted notices of completion of initial performance tune-up for the boilers, and an initial notification of compliance status for the MATS Rule to the USEPA on July 31, 2015. These have been followed by periodic testing reports on a quarterly basis. The first semi-annual compliance report was submitted to USEPA on January 27, 2016.

## MATS Compliance Options

The draft permit would also allow the source to switch to other compliance options, as provided by the MATS Rule. This would be addressed in planned Condition 6.5.9, which provides that such switches may occur following prior notification to Illinois EPA and applicable performance testing and revisions to the Notification of Compliance Status as necessary.

## **Changes in Section 7.1: Coal-Fired Boilers 31 and 32**

### Condition 7.1.4(f)-(j)

The applicable emission standards and control requirements under the Acid Rain Program (Section 6.1), CSAPR (Section 6.2), BART (Section 6.3), the Illinois Mercury Rule (Section 6.4) and MATS Rule (Section 6.5) would be referenced in these new conditions. A detailed discussion of these requirements is provided above in the discussions for the "Changes to Section 6.0".

### Condition 7.1.5(a)(ii)

This condition would be revised because CWLP no longer uses fuel oil during startup and for flame stabilization. CWLP currently uses natural gas for such purposes.

### Condition 7.1.5(f)

This condition would be added to explain that Boilers 31 and 32 are not subject to CAM for mercury, filterable PM, non-Hg HAP metals and acid gases because these emissions are subject to requirements in 40 CFR 63 Subpart UUUUU.

### Condition 7.1.5(g)

This condition would be added to explain that Boilers 31 and 32 are not subject to CAM for mercury emissions because these boilers are subject to state and federal rules that impose continuous compliance determination methods for mercury emissions.

### Condition 7.1.5(h)

Non-applicability statement for NSPPS 40 CFR Part 60 Subpart CCCC would be added to the permit because these boilers do not combust any solid waste as defined by 40 CFR Part 241.

### Condition 7.1.5(i)

Non-applicability statement would be added for the NESHAPs, 40 CFR Part 63 Subpart DDDDD and JJJJJJJ. This is because the boilers are utility boilers subject to the MATS rule, 40 CFR Part 63 Subpart UUUUU.

Condition 7.1.6(a)

A statement that the tune-ups required by the MATS Rule, as would be addressed in Condition 6.5.4(a), satisfy the semi-annual requirement for a combustion evaluation would be added to the condition.

Condition 7.1.6(b)

This condition would be added which specifies that natural gas would be the only fuel fired in auxiliary burners for Boilers 31 and 32, as addressed by Construction Permit 15040039 issued April 24, 2015.

Current Condition 7.1.7(a) (i)

Condition 7.1.7(a) (i), which required PM emission measurements to be completed within two years of the effective date of this condition, would be removed from the permit because the Permittee would now be required to complete PM emission testing in accordance with the MATS rule.

Condition 7.1.9(a) ((ii)

This condition would be revised because fuel oil is no longer used in Boilers 31 and 32.

Condition 7.1.9(a) (iv) (C)

This condition would be added to include a new recordkeeping requirement to maintain records for the total amount of natural gas burned by the auxiliary burners.

Condition 7.1.9(c) (ii) (B)

This recordkeeping requirement would be removed because the requirement is specific to Boilers 7 and 8, which have been permanently shut down.

**Changes in Section 7.2: Coal-Fired Boiler 33**

Condition 7.2.4(f)-(i)

The applicable emission standards and control requirements under the Acid Rain Program (Condition 6.1), CSAPR (Condition 6.2), the Illinois Mercury Rule (Condition 6.4) and MATS Rule requirements (Condition 6.5) would be referenced in these new conditions. A discussion of these requirements is provided above in the discussion for the "Changes to Section 6.0."

Condition 7.2.5(a) (i) and (b) (ii)

These conditions would be revised because CWLP will no longer use fuel oil during startup and for flame stabilization. They will use natural gas for such purposes.

Condition 7.2.5(g)

This condition would be added to explain that Boiler 33 are not subject to CAM for mercury, filterable PM, non-Hg HAP metals and acid gases because these emissions are subject to requirements in 40 CFR 63 Subpart UUUUU.

Condition 7.2.5(h)

This condition would be added to explain that Boiler 33 are not subject to CAM for mercury emissions because these boilers are subject to state and federal rules which impose continuous compliance determination methods for mercury emissions.

Condition 7.2.5(i)

This condition would be added to clarify that Boiler 33 is not subject to 35 IAC 214.121 for SO<sub>2</sub> emissions because this emission standard was invalidated.

Condition 7.2.5(j)

Non-applicability statement for NSPSs 40 CFR Part 60 Subpart CCCC would be added to the permit because this boiler does not combust any solid waste as defined by 40 CFR Part 241.

Condition 7.2.5(k)

Non-applicability statement would be added for the NESHAPs, 40 CFR Part 63 Subpart DDDDD and JJJJJJ. This is because the boiler is a utility boiler subject to the MATS rule, 40 CFR 63 Subpart UUUUU.

Condition 7.2.6(a)

A statement that the tune-ups required by the MATS Rule, as would be addressed in Condition 6.5.4(a), satisfy the semi-annual requirement for a combustion evaluation would be added to the condition.

Condition 7.2.6(c)

This condition would be added which specifies that natural gas would be the only fuel fired in auxiliary burners for Boilers 33, as addressed by Construction Permit 15040039 issued April 24, 2015.

Current Condition 7.2.7(a) (i)

Condition 7.2.7(a) (i), which required PM emission measurements to be completed within one year of the effective date of this condition, would be removed from the permit because the source would now be required to complete PM emission testing in accordance with the MATS rule.

Condition 7.2.9(a) (ii) (C)

This condition would be added to include a new recordkeeping requirement to maintain records for the total amount of natural gas burned by the auxiliary burner.

Condition 7.2.9(a) (iii)

This condition would be revised because fuel oil will no longer be used as an auxiliary fuel in Boiler 33.

**Changes in Section 7.9: Emergency Engine-Generators**

The Emergency Engines Section of the current permit would be re-numbered from Section 7.7 to Section 7.9 due to the addition of new sections to the CAAPP permit for the new and modified bulk material handling operations and the new cooling tower.

Condition 7.9.1

This condition would be updated to reflect that ultra-low-sulfur diesel (ULSD) is now the only distillate fuel used in these engines. USEPA rules limit the sulfur content of ULSD to 15 ppm by weight.<sup>11</sup>

Condition 7.9.2

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<sup>11</sup> This change in the fuel supply for the engines has led to other planned changes to Section 7.9 to appropriately simplify the compliance procedures related to the sulfur content of the fuel for these engines. As these changes must be addressed as significant modifications to the CAAPP permit, these changes will be discussed later.

The list of emission units would be revised to specifically identify these engines as "emergency" engines. Specific information regarding the model and size of the engines would also be added to the description. The additional information is relevant for identifying the specific requirements of the federal NESHAP standards, 40 CFR 63, Subpart ZZZZ, that are applicable to engines used for emergency purposes.

Condition 7.9.3(a)

This condition would be revised to clarify that the affected engines addressed by this section are also referred to as "affected reciprocating internal combustion engines (RICE)" under the NESHAP standards, 40 CFR 63 Subpart ZZZZ, for engines.

Condition 7.9.4(c) (i)

This condition would be relocated from a non-applicability statement. As new units operating pursuant to the "new unit exemption" in the Acid Rain Program 40 CFR 72.7(a), the affected engines are subject to a regulatory limit on the sulfur content of the fuel used in the engine, 0.05 weight percent or 500 ppm by weight.

Condition 7.9.4(c) (i)

This condition would be added to identify new state requirements in 35 IAC Part 214, which would restrict the engines to use of ultra-low-sulfur diesel fuel (ULSD) beginning January 1, 2017

Condition 7.9.5(c)

This condition would be revised to specify that the affected engines are not subject to CAM requirements in 40 CFR 64 because the affected engines do not use any add-on control devices to comply with applicable emission limitations or standards.

Condition 7.9.5(d)

This condition would be revised to clarify that the affected engines are only subject to certain specific provisions of the Acid Rain Program necessary to maintain exempt status.

Condition 7.9.5(e)

This condition would be added to indicate that, although the engines are subject to the requirements of the NESHAP for engines, 40 CFR 63 Subpart ZZZZ, CWLP is not subject to any substantive requirements of this NESHAP for the engines. This is because it meets the exemption for emergency engines at 40 CFR 63.6590(b) (3) (iii).

Condition 7.9.6(a)

This new condition would require the engines to be operated to comply with the applicable criteria for emergency engines in 40 CFR 63 Subpart ZZZZ. This is because the CAAPP permit is based on the engines maintaining emergency status under 40 CFR 63 Subpart ZZZZ so that substantive requirements of this NESHAP are not applicable.

Condition 7.9.6(d)

This condition would be removed from the permit. This is because it duplicated requirements for opacity observations in Condition 7.9.7.

Condition 7.9.8

This condition would be revised to more clearly indicate applicable sampling and analysis requirements for the affected engines.

Condition 7.9.10-2

This new condition would require CWLP to specifically notify the Illinois EPA if the annual NOx emissions of the engines exceed 32 tons, i.e., 80 percent of the applicable annual limit on NOx emissions that was established so that these engines would not be major modification under the PSD rules. The required notification will alert the Illinois EPA to such emissions so that it can determine whether it is appropriate to require emission testing for the NOx emissions of the engines.

**Changes in Section 10.0:**

Current Section 10.3, Attachment 3

This attachment, an Example Certification by a Responsible Official, would be re-numbered as Attachment 5.

Current Section 10.4, Attachment 4

This attachment, which identifies guidance about the CAAPP that is available on the internet, would be re-numbered as Attachment 6.

Current Section 10.5, Attachment 5

This attachment, the Acid Rain Program permit would be re-numbered as Attachment 3.

Current Section 10.6, Attachment 6

This attachment, the CAM Plans would be re-numbered as Attachment 4.

Section 10.3

The current acid rain permit would be replaced with a renewed acid rain permit. The planned renewal of the current acid rain permit is discussed in Chapter 5 of this Statement of Basis.

## **CHAPTER 4 PLANNED CHANGES TO THE CAAPP PERMIT THROUGH SIGNIFICANT MODIFICATION**

### **4.1 Changes Related to the Dallman 4 Project**

The following changes would be made to the CAAPP permit in response to an application from CWLP for a significant modification to the permit to address the Dallman 4 Project.<sup>12</sup> This project was addressed by Construction Permit/PSD Approval 04110050. It involved the installation of a new coal-fired boiler, Dallman Boiler 4, and ancillary equipment for this boiler.

The Dallman 4 project was a major modification under the PSD rules, 40 CFR 52.21, for emissions of PM (filterable particulate), Total PM (the total of filterable and condensable particulate), carbon monoxide (CO) and sulfuric acid mist. As such, Boiler 4 is subject to emission limits and other requirements that were established as best Available Control Technology (BACT) in Permit 04110050. Boiler 4 is not subject to BACT for other pollutants. This was generally because the emissions of the Boiler 4 project were not significant for other pollutants so that the project was not a major modification. For NO<sub>x</sub> and SO<sub>2</sub>, the net increases in emissions considering the contemporaneous decreases in emissions from the permanent shut down of Lakeside 7 and 8 were not significant.<sup>13</sup> The revised CAAPP permit would carry over BACT requirements from Permit 04110050 for Boiler 4 and other ancillary equipment into the CAAPP permit. In this regard, the applicable BACT limit for emissions of Total PM from Boiler 4 is 0.018 lb/mmBtu. This is the alternative, lower limit for Total PM set by Condition 2.1.15 of Permit 04110050 if CWLP forgoes an evaluation of PM<sub>10</sub> based on the actual performance of Boiler 4 for Total PM, as shown by testing during the initial years of operation of Boiler 4.<sup>14</sup>

The Dallman 4 project was also a major project for emissions of hazardous air pollutants (HAPs). Permit 04110050 addressed the possibility that Boiler 4 would not be subject to NESHAP standards adopted by USEPA so that a case-by-case determination of Maximum Achievable Control Technology (MACT) would be required for Boiler 4 pursuant to Section 112(g) of the Clean Air Act. This was done by including a "contingent" determination of MACT that would be applicable if USEPA did not adopt NESHAP standards for coal-fired utility boilers. However, as USEPA has adopted 40 CFR 63 Subpart UUUUU, the MATS rule, and Boiler 4 is subject to its requirements, the contingent determination of MACT is not applicable.<sup>15</sup>

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<sup>12</sup> This application was submitted by CWLP on March 30, 2010. As the initial CAAPP permit for the Dallman Station was stayed at that time, the Illinois EPA could not act on this application for a modification to the CAAPP permit until the appeal was resolved. The Illinois EPA is now acting on this application. The circumstances are similar to those of the reopening proceeding as it is appropriate to bring the CAAPP permit by addressing the Dallman 4 Project in the permit. The circumstances are different as the Illinois EPA would be acting on an application for a significant modification to the permit rather than in a reopening proceeding.

<sup>13</sup> Permit 04110050 was issued before greenhouse gases became a regulated air pollutant under the Clean Air Act. Accordingly, emissions of carbon dioxide or other greenhouse gases were not addressed in this permit.

<sup>14</sup> The BACT limit for Total PM that initially applied to Boiler 4 was 0.035 lb/mmBtu, as provided by Condition 2.1.2(b)(i)(B) of Permit 04110050.

<sup>15</sup> Permit 04110050 also included certain other "contingent requirements" that are not applicable. As addressed in Condition 1.6 of Permit 04110050, CWLP entered into a private agreement with the Sierra Club to comply with certain requirements related to the emissions of the Dallman Station and other matters. This agreement was contingent on a third party not appealing Permit 04110050 before either the USEPA's Environmental

#### **Addition of Section 7.3: Coal Fired Boiler 4**

This entire section would be added to address Dallman Boiler 4, which was installed at the Dallman Station pursuant to Construction Permit/PSD Approval 04110050. Boiler 4 is a pulverized coal-fired boiler equipped with low NO<sub>x</sub> combustion technology, selective catalytic reduction system, baghouse or fabric filter, scrubber, and wet electrostatic precipitator.

This new boiler would be generally described in Condition 7.3.1.

The new addressed Section 7.3 would be identified in Condition 7.3.2.

For clarity, separate conditions are proposed to address the various categories of emission standards and control requirements to the boiler. BACT requirements would be set forth in Condition 7.3.3-1. Applicable federal emission standards, e.g., the NSPS, 40 CFR 60 Subpart Da, would be addressed in Condition 7.3.3-2. Applicable state emission standard would be addressed in Condition 7.3.3-3. The draft of the permit would provide authorization for violations of state standards for PM, CO and opacity<sup>16</sup> during startup and malfunction or breakdown of Boiler 4, as is currently available pursuant to 35 IAC Part 201 Subpart I. The applicable state standard apply on a short-term basis

Condition 7.3.4 would contain relevant non-applicability statement for Boiler 4.

Condition 7.3.5 would contain work practice requirements.

Condition 7.3.6 would contain emission limits from Permit 04110050 to assure that the Dallman 4 Project would not be accompanied by significant increases in emissions of NO<sub>x</sub> and SO<sub>2</sub>. It would also contain other limits set by this permit to define the permitted emissions of Boiler 4.

Condition 7.3.7 would contain requirements for emission testing.

Condition 7.3.8 would contain "monitoring" requirements, including requirements for emissions monitoring, opacity monitoring, operational monitoring and sampling and analysis of coal. Section 7.3.8 would also address the CAM plans that CWLP has submitted for Boiler 4, as are proposed to be approved as will be discussed in more detail below.

Condition 7.3.9 would contain recordkeeping requirements.

Condition "7.3.10" dealing with reporting would be divided into three separate conditions, like the conditions for reporting for Boilers 31, 32 and 33. Condition 7.3.10-1 would address reporting requirements for deviations. Condition 7.3.10-2 would address routine, periodic reporting. Condition 7.3.10-3 would address additional reporting requirements for malfunction/breakdown events and for startups.

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Appeals Board or the Illinois Pollution Control Board. However, Permit 04110050 was appealed to the Environmental Appeals Board. As a result these additional requirements did not become effective.

<sup>16</sup> The applicable state emission standards for these pollutants apply on an hourly average or, in the case of opacity, on a 6-minute average.

### **Removal of Current Section 7.5: Fly Ash Handling Equipment**

This current section would be removed from the permit because fly ash handling equipment addressed by this section of the permit is no longer in service. New and modified fly ash handling equipment would be addressed in Section 7.7 of the permit. With the renumbering of sections, current Section 7.4 for coal processing will become Section 7.5.

### **Addition of Section 7.7: New and Modified Bulk Material Handling, Processing and Storage Operations**

This section would be added to address the handling, processing and storage equipment for bulk materials that was installed or modified as part of the Dallman 4 Project.

For clarity, separate conditions are again proposed to address the various categories of emission standards and control requirements that apply to these units. BACT requirements would be set forth in Condition 7.7.3-1. Applicable federal emission standards, e.g., the NSPS, 40 CFR 60 Subpart 000, would be addressed in Condition 7.3.3-2. Applicable state emission standard would be addressed in Condition 7.3.3-3.

Condition 7.3.5(a)(iii) would require CWLP to identify and implement "established" control measures for these new and modified operations, in the same way that this is required for existing operations by the current CAAPP permit. The Permittee has already incorporated the control measures for these operations into the record of control measures submitted to the Illinois EPA. Other aspect for Periodic Monitoring for these operations would also be similar to those for existing operations.

### **Addition of Section 7.8: Cooling Tower**

This section would be added to address the cooling tower for Boiler 4 installed as part of the Dallman 4 Project.

### **Addition of Section 7.10: Emergency Fire Pump Engine**

This new section would be added to address the emergency fire pump engine installed as part of the Dallman 4 project addressed by Construction Permit/PSD Approval 04110050.<sup>17</sup> A separate section of the permit related to the emergency fire pump engine was necessary because the engine is not subject to the requirements in 40 CFR Subpart ZZZZ but was subject to requirements of 40 CFR 60 Subpart IIII. The emergency engines in Section 7.9 of the permit were subject to the requirement in 40 CFR 60 Subpart ZZZZ and were therefore exempt from the requirements in 40 CFR 60 Subpart IIII.

### **Addition of Section 7.12: Roadways and Other Open Area Sources of Fugitive Dust**

This new section would be added to address requirements for roadways and open area source of fugitive dust as addressed by Construction Permit 04110050 for

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<sup>17</sup> CWLP only installed only one of the two emergency diesel engines addressed by Permit 04110050.

the Dallman 4 Project. As would be reflected in the revised CAAPP Permit, CWLP is required to implement a fugitive dust control for the Dallman Station pursuant to Permit 04110050.

#### **4.2 Discussion of CAM for the Dallman Boiler 4**

##### Introduction

For Boiler 4, four CAM plans are required as have been submitted by CWLP, to address emissions of three pollutants:

- 1) PM, as related to the limit of 35 IAC 212.204, 0.1 lb/mmBtu, on a 1-hour average;
- 2) PM, as related to the limit for the boiler set as BACT, 0.012 lb/mmBtu, 3-hour average;
- 3) Sulfuric acid mist, as related to the limit for the boiler set as BACT, 0.005 lb/mmBtu; and
- 4) Total PM (i.e., the combination of PM and condensable particulate), as related to the limit for the boiler set as BACT, 0.018 lb/mmBtu.

In the Compliance Assurance Monitoring rule (CAM), 40 CFR Part 64, the need for a CAM Plan is addressed separately for each regulated pollutant that is emitted by an emission unit.<sup>18</sup> If an emission unit is subject to more than one standard or limit for a pollutant, as is the case for Boiler 4 for PM emissions, it may also be appropriate to have more than one CAM Plan for that pollutant to address the different standards and limits. CAM plans are not required for Boiler 4 for emissions of other pollutants because either the applicability criteria of CAM are not met or an exemption applies. For example, for emissions of CO and VOM, Boiler 4 does not meet the applicability criterion at 40 CFR 64.2(a)(2), since add-on control equipment is not used to comply with any applicable limit or standard for CO or VOM. For emissions of SO<sub>2</sub> and NO<sub>x</sub>, the exemption at 40 CFR 64.2(b)(vi) is applicable since the CAAPP permit would specify that continuous emission monitoring, a continuous compliance determination method, be used to determine compliance with applicable limits and standards for these pollutants.<sup>19</sup>

The Illinois EPA is proposing to approve the four CAM Plans that CWLP has submitted for Dallman Boiler 4.<sup>20</sup> The relevant elements of these plans, as

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<sup>18</sup> To address the need for CAM Plan(s) for a pollutant, 40 CFR Part 64 uses the term "Pollutant-Specific Emissions Unit" (PSEU)<sup>18</sup> to distinguish each pollutant that must be considered when addressing whether a CAM Plan is needed for an emission unit relative to the emissions of that pollutant. A "pollutant specific-emissions unit" is defined by 40 CFR 64.1 to mean "an emissions unit considered separately with respect to each regulated pollutant."

<sup>19</sup> New and modified units that are part of the Dallman 4 Project other than the boiler itself do not require CAM Plans. This is generally because the applicability criteria in 40 CFR 64.2(a)(2) or (3) are not met. This would be addressed in the revised CAAPP permit by appropriate non-applicability statements in the new sections of the permit.

<sup>20</sup> As reflected in the current CAAPP permit, CWLP's CAM Plans for Boilers 31, 32 and 33 have already been approved by the Illinois EPA. These CAM plans all address PM emissions of the boilers compared to standards that limit PM emissions to 0.1 pounds/mmBtu. In this regard, the CAM plan for Boilers 31 and 32 addresses compliance with 35 IAC 212.202, which is the applicable state standard for PM emissions. The CAM Plan for

specified by 40 CFR 64.6, would be addressed by the tables in Attachment 4 of the CAAPP permit. In this regard, the Illinois EPA is proposing that the CAAPP permit reflect the standard requirements of 40 CFR Part 64. For example, as provided by 40 CFR 64.7(c), upon occurrence of an excursion, CWLP would have to take action for the boiler as necessary to return to the normal or usual manner of operation, which would reasonably assure that the boiler is complying with the applicable limitation. The trigger for implementation of a Quality Improvement Plan pursuant to 40 CFR 64.8 is 5 percent of the boiler's operating time on a quarterly basis, consistent with the 5 percent threshold provided in 40 CFR 64.8(a). Concerns for the compliance status of Boiler 4 have not been identified that would warrant development of source-specific requirements in the CAM plans, which expand upon or adapt the standard requirements contained in 40 CFR Part 64.

Description of the CAM Plans for PM Emissions:

The CAM plans for PM emissions address filterable particulate, as would be measured Reference Method 5 and other reference methods for filterable particulate. One plan addresses PM emissions on an hourly average basis compared to the state emission standard pursuant to 35 IAC 212.204, 0.10 lb/mmBtu. The other plan addresses PM emissions compared to the limit set as BACT, 0.012 lb/mmBtu, three-hour block average. The plans are the same except for the numerical limits that are addressed, 0.10 and 0.012 lb/mmBtu, and the associated compliance periods, one-hour and three-hour averages.

In the CAM plans for PM emissions, the primary indicator is emissions as measured by the continuous monitoring system for PM emissions. This continuous monitoring system is located on the stack of Boiler 4. PM emissions are directly measured by determining the mass of PM that accumulates on a filter twice an hour. As this continuous monitoring system provides a direct determination of PM emissions, it provides data that can be compared to the applicable limit on both a 1-hour and 3-hour average.

CWLP's CAM plans for PM emissions also have a secondary indicator, opacity.<sup>21</sup> The complexity of the PM CMS is such that CWLP has elected to include a

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Boiler 33 addresses compliance with both 40 CFR 60.42(a)(1) and 35 IAC 212.204, the applicable NSPS standard and the applicable state standard.

<sup>21</sup> For purposes of air pollution control, opacity is the degree to which the transmission of light through the exhaust from an emission unit is reduced by the presence of particulate in the exhaust. In simpler terms, it is the "obscuring power" of the exhaust, expressed as a percent. As particulate in the exhaust from an emission unit acts to interfere with the passage of light through that exhaust, the level of opacity from an emission unit is indicative of the level of particulate in the exhaust. Accordingly, opacity readily serves as an indicator of PM emissions and the performance of PM control devices. Higher levels of opacity indicate higher rates of emissions. Lower levels of opacity indicate lower rates of emissions. Data for opacity is commonly reported as six minute averages, consistent with the terms in which opacity is commonly regulated. However, opacity can also be determined for shorter or longer averaging periods, including on a 1-hour and 3-hour average basis, as proposed by CWLP in its CAM Plans for PM.

As a general matter, opacity monitoring is a well-established means to address PM emissions. Numerical values of opacity can be reliably determined by observations of the exhaust from emission units by individuals who have been properly trained and demonstrated their ability to make such observations, as addressed in USEPA Reference Method 9, *Visual Determination of the Opacity of Emissions from Stationary Sources*. Numerical measurements of observations can also be made with monitoring instruments that are installed in the stack or duct work of an emission unit, in which case opacity can be determined on a continuous basis. In such case, opacity may be readily measured over

secondary indicator in its CAM plans for PM emissions. Opacity would be used as the indicator for compliance when the PM CMS is not in service and direct data for PM emissions is not available.

Opacity is monitored by a Continuous Opacity Monitor System (COMS) on the boiler. This opacity monitoring system must be operated to meet the established requirements for opacity monitoring systems per 40 CFR Parts 60 and 75. For opacity, an excursion would be opacity greater than 20 percent. CWLP's CAM Plan does not include a process by which a new indicator range could be set for the boiler without a permit revision.

For Boiler 4, opacity will effectively serve as a secondary indicator for the CAM plans for PM emissions. Indeed, for this boiler, opacity monitoring is currently required by rule as a means to address proper operation as related to PM emissions. 40 CFR 64.3(d)(2) provides that a COMS that satisfies the monitoring requirements of 40 CFR Part 75, like the COMS on these boilers, shall be deemed to satisfy the general design criteria for a CAM Plan, provided that monitoring with a COMS may be subject to the criteria for establishing indicator ranges.<sup>22, 23</sup> Given these circumstances, it is wholly appropriate for CWLP to have selected opacity as a secondary indicator in its CAM Plans for PM emissions.<sup>24</sup>

CWLP selected the value of the applicable opacity standard, 20 percent, as the indicator value for opacity. This is a reasonable value based on PM emission testing conducted for Boiler 4. The most recent testing for Boiler 4 pursuant to the MATS rule, using the appropriate test method for PM emissions pursuant to the MATS rule, was on February 18, 2016. The test included three runs, each nominally two hours in duration. The average opacity monitored during the period of testing was about 2.0 percent. The average PM emission rate measured by the test was 0.0022 lb/mmBtu. This represents PM emissions that are only about 19 percent of the more restrictive limit for PM, 0.012 lb/mmBtu, three hour average (a compliance margin of about 81 percent).

#### Description of the CAM Plan for Emissions of Sulfuric Acid Mist:

The CAM plan for sulfuric acid mist specifically addressed the operation of the wet electrostatic precipitator (wet ESP) in the control train for Boiler

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average periods longer than six minutes, based on the average of data over the specified period.

<sup>22</sup> In addition, 40 CFR 64.4(b) also provides that a COMS that satisfies the requirements and specifications in 40 CFR 64.3(d), as the COMS on these coal-fired boilers do, is "presumptively acceptable monitoring" for purposes of CAM. As CWLP's CAM Plan would use presumptively acceptable monitoring, CWLP did not have to provide justification for the appropriateness for the use continuous opacity monitoring in its CAM Plan other than an explanation of the applicability of such monitoring to these boilers, unless data or information is brought forward to rebut that assumption.

<sup>23</sup> As explained by USEPA in the preamble to the adoption of CAM, CAM monitoring with a required COMS must be conducted using an appropriate indicator range for opacity that satisfies 40 CFR 64.3(a)(2) and (3). See 62 FR 54923, October 22, 1997.

<sup>24</sup> The fact that CWLP is required to conduct operational monitoring for the pressure drop of the baghouse does not show that the CAM Plan should use this parameter as a secondary indicator for PM emissions. It is appropriate that such data as it will facilitate proper maintenance of the baghouse. It may directly reveal deterioration in the operational condition of specific sections in the baghouse, which should be addressed as part of periodic maintenance and repair of the ESP. This data may also facilitate corrective action in the event of an excursion. However, opacity more directly addresses the actual operation of the baghouse to control emissions.

4. This is the device that was installed to control the emissions of sulfuric acid mist, and more generally emissions of condensable particulate, from Boiler 4. Wet ESPs are similar to conventional dry ESPs except that the interior surfaces of the ESP are washed with a flow of water. This water serves to neutralize the acidity of the sulfuric acid mist or other pollutants that are collected, corrosion of the interior components and surfaces of the ESP.

CWLP has selected flow of electrical current through the second, "back" field of the wet ESP as the indicator of performance of the wet ESP to control sulfuric acid mist. This parameter is measured by a continuous parametric monitoring system. The emission testing for Boiler 4 that has been conducted shows that a direct correlation between this parameter and emissions of sulfuric acid mist, with emissions of sulfuric acid mist of 0.005 lb/mmBtu with an electrical current of 287 mA. CWLP's operating procedures provide for the wet ESP to normally be operated at least at 350 mA, which assures compliance with the applicable limit for sulfuric acid mist. As CWLP has identified an operating parameter for the wet ESP that correlates with emissions of sulfuric acid mist, it is reasonable that CWLP uses this parameter in the CAM plan for sulfuric acid mist.

#### Description of the CAM Plan for Emissions of Total PM:

The CAM plan for total PM "combines" the CAM plan for PM emissions, 3-hour average, and the CAM plan for emissions of sulfuric acid mist. The plan for PM addresses the contribution of filterable PM to total PM. The plan for sulfuric acid mist addresses the contribution of condensable particulate to total PM, using sulfuric acid mist as a surrogate for condensable particulate. This is reasonable as sulfuric acid mist is commonly considered to make up the majority of the condensable particulate from coal-fired utility boilers.

Given this approach to CAM for total PM, the CAM plan does not involve parameters or monitoring that is not otherwise addressed by the CAM plans for PM and sulfuric acid mist, as already discussed. Separate indicator ranges are also proposed for the parameters associated with each of these constituent pollutants, consistent with the indicator ranges in the individual CAM plans for PM and sulfuric acid mist. An excursion for either PM or sulfuric acid mist will be an excursion for total PM.<sup>25</sup> Given that the total PM is the combination of filterable particulate and condensable particulate this a reasonable approach to CAM for total PM.

### **4.3 Other Planned Changes by Significant Modification**

The following other significant modification changes would be made to the CAAPP permit as a result of ongoing discussions with CWLP and to provide consistency with the CAAPP permits for other coal-fired power plant in Illinois. These changes are outside the scope of the permit reopening and are not directly related to the Dallman 4 Project.

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<sup>25</sup> CWLP did not develop a more complex CAM plan for total PM that would account for the "over compliance" with the limit for PM or sulfuric acid mist that would involve determinations of the emission rates of each constituent pollutant. If such a plan had been developed, an excursion for PM or sulfuric acid mist would not necessarily also constitute an excursion for total PM.

## **Changes in Section 5.0: Overall Source Conditions**

### Condition 5.2.6

This source-wide condition would be updated to more clearly identify the requirements imposed by 35 IAC 244 for development and implementation of an Episode Action Plan. This condition would also provide that the Episode Action Plan previously submitted to the Illinois EPA would be incorporated by reference into the CAAPP permit.

### Condition 5.2.7

This source wide condition would be added to incorporate by reference the Control Measures Record submitted to the Illinois EPA as required by material handling conditions in the CAAPP permit. This condition would also specify that any revisions to the Control Measures Records submitted to the Illinois EPA would be incorporated by reference into the CAAPP permit. The initial record was submitted to the Illinois EPA in 2013.

### Condition 5.4

Two statements in this condition providing the origin of authority would be corrected.

## **Changes in Sections 7.1 and 7.2: Coal-Fired Boilers 31 and 32 and Boiler 33**

### Conditions 7.1.7(a) (iii) and 7.2.7(a) (i)

These conditions require that the source conduct testing for these coal-fired boilers for PM emissions if the boiler(s) operate at a load that is significantly higher than the load at which testing was most recently conducted for the boiler for a significant amount of time. The condition would be revised to more appropriately address the circumstances of these boilers at CWLP. For this purpose, the criterion for load on the boiler would become operation at a load 15 percent or greater than the load at which testing was last conducted, for more than 72 hours in a calendar quarter. The current criteria are operation a load that is more than either 2 percent or 5 Megawatts higher than the load at which PM testing was last conducted for more than 72 hours in a quarter.<sup>26</sup>

These criteria in the initial permit were not appropriately tailored to these particular boilers. The original criteria would potentially have required that testing for PM emissions be conducted in circumstances in which it would not be warranted. The changes to these criteria are not expected to enable the regular testing of the boilers for PM emissions to be conducted while operating at loads that are lower than the loads at which such testing would otherwise have been conducted. In any case, Conditions 7.1.7(a) (v) and 7.2.7(a) (v) generally provide that the source must conduct testing for these boilers for PM emissions upon request by the Illinois EPA for such testing.

### Condition 7.1.7(a) (iv) and 7.2.7(a) (iv)

These conditions addresses certain emission testing of the coal-fired boilers that may be required as a result of firing or burning material other than standard fuel in the coal-fired boilers.<sup>27</sup> As present in the current permit,

<sup>26</sup> Duration of operation at "high load" is considered in these criteria so that infrequent operation at such loads would not trigger the requirement for retesting. This is because it would be unreasonable to expect that retesting would be able to be conducted that higher load range if such operation has only occurred infrequently.

<sup>27</sup> For these boilers, as addressed in Conditions 7.1.11 and 7.2.11, non-standard fuels

this condition generally requires that testing must be conducted for the coal-fired boilers for PM and CO emissions if in a calendar quarter standard fuel (i.e., coal and natural gas) make up less than 97 percent, by weight, of the material burned in a boiler. The revised permit would change this to require such testing be conducted if the alternative fuel burned during the quarter is greater than 3 percent by weight.

Changes would also be made to address aspects of this testing that were not considered or addressed during the development of the current permit. This testing would not be required if testing has already been conducted for the boilers while burning non-standard fuel at a level that would satisfy the requirements established by this condition. This testing also would not be required to be conducted while burning non-standard fuel material at a rate that would exceed the rates at which the feed systems for such materials would be operated. In addition, various changes would be made to clarify the language of this condition.

In Conditions 7.1.7(a) (iv) (A) and 7.2.7(a) (iv) (A), changes would be made so that this testing would not be required for the coal-fired boilers if testing has already been conducted while burning non-standard fuel at a level that would satisfy the requirements of this condition. For this purpose, this prior testing must have been conducted while burning non-standards fuels at a level that is equal to or greater than the level at which such material was burned in a calendar quarter or at the maximum rate at which the feed systems for these materials would be operated. This change was needed because the current permit did not consider that the Permittee might proactively conduct the emissions testing that would otherwise be required by this condition, before it was actually required by this condition. The current permit was predicated upon this testing being conducted following a calendar quarter in which the amount of standard fuel burned in a boiler was less than 97 percent by weight.

In Conditions 7.1.7(a) (iv) (B) and 7.2.7(a) (iv) (B), changes would be made so that this testing would not be required to be conducted while burning non-standard fuel at a rate that would exceed the maximum rate at which the feed systems for such materials are operated. This change was needed because this condition in the current permit provided that the percentage of non-standard fuel burned during this testing must be at least 1.25 times the percentage at which this material was burned in the calendar quarter that triggered the need to conduct this testing. This requirement was intended to assure that this testing would occur during appropriate operating conditions that would conservatively address the effect of burning non-standard fuel on emissions. The current permit did not consider that this requirement might require that the feed systems for these materials be operated at rates that would be higher than the capacity of these systems or the rates at which these systems would ever be operated. The revised permit would still require this testing to be conducted under appropriate operating conditions. This is because this testing would still be required to be conducted at least at 1.25 times the percentage at which such material was burned in the quarter that triggered the need for testing or at the maximum rate at which the feed systems would be operated, whichever is lower. This addresses circumstance in which the use of non-standard fuel is constrained by the operation of the feed systems. It also addresses the circumstances if the use of these materials is far below the

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or fuel materials include used oil and boiler cleaning residue, and alternative fuel materials that do not constitute waste and were not generated from either municipal waste or hazardous waste.

level at which the feed systems would be operated, so that the 1.25 time factor governs.

Various changes would also be made to Conditions 7.1.7(a) (iv) (C) and 7.2.7(a) (iv) (C) to clarify terminology. These provisions would no longer refer to the "fuel supply" for the boilers. It was unclear whether this phrase referred to the material that was actually burned in the boilers, as was intended, or the material that was supplied to the Permittee and was available to be burned in the boiler. In addition, "burning" or "burned" would be used in place of the word "firing". This change was made to use terminology that is simpler and now more common.

Minor changes would be made to clarify when additional PM and CO testing is required due to burning of alternative fuels in the boilers. Also, references to burning process wastes would be removed since the boilers would no longer be authorized to burn solid waste so they would not be classified as Commercial and Industrial Solid Waste Incineration Units and subject to 40 CFR Part 60 Subpart CCCC.

Condition 7.1.7(b) (i) and 7.2.7(b) (i)

In the current CAAPP permit, Conditions 7.1.7(b) (i) and 7.2.7(b) (i) require that measurements of CO and PM emissions be performed at the maximum operating loads of the affected boilers and other operating conditions that are representative of normal operation. These conditions would be revised to allow this testing to be performed at 90 percent or better of the seasonal maximum operating loads of the affected boilers or related turbines. This provision would now reflect current site configuration and is consistent with testing at maximum loads done during routine RATA testing.

Conditions 7.1.7(e) (iii) (F) and 7.2.7(e) (iii) (F)

Conditions 7.1.7(e) and 7.2.7(e) deal with required contents of test reports that the Permittee must submit for emissions testing conducted for these coal-fired boilers. Conditions 7.1.7(e) (iii) (F) and 7.2.7(e) (iii) (F) would be added to the information that must be provided in these reports for the operation of the boilers during testing. It requires that these reports include information on the amount of non-standard fuel burned during testing if the testing was conducted to address emissions while burning non-standard fuel, as is required by Conditions 7.1.7(a) (iv) and 7.2.7(a) (iv).

Conditions 7.1.9(g) (ii) (D) (III) and 7.2.9(g) (ii) (D) (III)

These conditions would be revised to require the Permittee to include an estimate for emissions of PM and CO on a qualitative or, if available, a quantitative basis. This change is consistent with comparable conditions in other CAAPP permits for coal-fired boilers in Illinois.

Conditions 7.1.10-2(a) (i) (B) and 7.2.10-2(a) (i) (B)

Revisions to these conditions would be made so that the information that must be periodically reported related to the load at which the boilers have operated would be consistent with the new criterion for retesting that would be set in Condition 7.1.7(a) (ii), i.e., operation at 15% higher than the greatest load on the boiler during the most recent set of PM tests for more than 72 hours.

Conditions 7.1.10-2(d) and 7.2.10-2(d)

These conditions, which deal with the information that must be included in the quarterly reports for opacity from the boilers, would now require CWLP to include detailed information regarding the operating status of the opacity monitoring systems. The previously issued permit would only have required this detailed information for a system if the downtime during a quarter were more than 5 percent of the operation time of the associated boiler, consistent with reporting requirements under 40 CFR 60.8(c). This change was made in consideration of comments received on similar conditions in CAAPP permits for other coal power plants in Illinois.

Conditions 7.1.11(c) and 7.2.11(c)

References to burning process wastes would be removed since the boilers would no longer be authorized to burn solid waste so they would not be classified as Commercial and Industrial Solid Waste Incineration Units and subject to 40 CFR Part 60 Subpart CCCC (See Non-Applicability statement in Condition 7.1.5(h) and 7.2.5(j)).

Conditions 7.1.12(a) (ii) (A) and 7.2.12(a) (ii) (A)

These conditions address 35 IAC 212.123(b), which provides that opacity may be greater than 30 percent, 6-minute average, if opacity was not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such emissions only come from one source within a 1000 foot radius, limited to three times in any 24 hour period. As discrete measurements of opacity may be used to comply with this standard, these conditions would be revised to allow discrete measurements to be made at up to 15 seconds intervals, instead of the current 10 seconds interval. With this revision, the permit would still provide for the reasonable implementation of 35 IAC 212.123(b) by the source. This revision will also potentially reduce the amount of data that must be considered when the source elects to show compliance by means of this alternative to 35 IAC 212.123(a). It will also accommodate existing software for continuous opacity monitors systems that records measured data at an interval greater than 10 seconds.

**Changes in Only Section 7.1: Coal-Fired Boilers 31 and 32**

Condition 7.1.1

The description of the boilers would be updated to reflect currently installed pollution control equipment of Boilers 31 and 32. It would also be revised to indicate use of natural gas, rather than oil as the auxiliary fuel. Boilers 7 and 8 would be removed from the description because these boilers are now shut down. A note stating that the description is for informational purposes only would be also added to the description.

Condition 7.1.2

The list of emission units would be revised because Lakeside Boilers 7 and 8 are no longer operational. The two boilers that would now be addressed in this section are typically referred to as Boilers 31 and 32 by plant personnel, so the table would be revised to reflect this site-specific practice. The emission control and monitoring equipment for Boilers 31 and 32 would also be updated to reflect the installed configuration for this equipment.

Condition 7.1.4(c)

This condition would be revised to reflect the current limit pursuant to 35 IAC 214.184 that applies for the combined hourly emissions of SO<sub>2</sub> from Boilers 31,

32, 33 and 4, the boilers that are now at the Dallman Station. CWLP provided the relevant data for stack heights and an updated calculation to support the planned changes to this condition.

Condition 7.1.7(b) (ii)

Conditions 7.1.7(b) (ii) would be revised to clarify the intent that when both boilers are operating during testing, the boilers and their associated controls must be operated in a similar manner while measurements are being performed such that conditions are representative of normal operation for both boilers.

Condition 7.1.8(d)

This condition would be revised to add oxygen or carbon dioxide concentrations to the parameters that CWLP must continuously monitor.

Condition 7.1.9(d) (ii)

This recordkeeping condition would be revised due to the changes that would be made to the SO<sub>2</sub> emission limitation in Condition 7.1.4(c).

**Changes in Only Section 7.2: Coal-Fired Boiler 33**

Condition 7.2.1

This condition would be revised to indicate that Boiler 33 now only uses natural gas during startup and for flame stabilization. A note would also be added to this condition to clarify that the general description for coal-fired Boiler 33 in Condition 7.2.1 is for informational purposes only and does not establish any requirements or limitations.

Condition 7.2.2

The list of emission units would be revised because the boiler addressed in this section is typically referred to as Boiler 33 by CWLP, so the table will be revised to reflect this practice. The monitoring equipment for Boiler 33 would also be updated to reflect the installed configuration for this equipment.

Condition 7.2.9(g) (ii) (D) (IV)

This recordkeeping condition would be removed from the permit because the Permittee is not authorized by Condition 7.2.3(c) to exceed emission standards for NO<sub>x</sub> or SO<sub>2</sub> during malfunctions or breakdowns of the boiler.

**Changes in Section 7.4: Existing Coal Handling Equipment (Former Section 7.3)**

This section is now entitled "existing" coal handling equipment. This change and similar changes to Sections 7.5 and 7.6 would be made to differentiate this equipment from the new and modified ancillary equipment that was of the Dallman Boiler 4 project.

Condition 7.4.6(a)

This condition would be revised to clarify which control measures are considered to be established control measures for the purpose of this section.

Condition 7.4.9(b)

This condition would be revised to clearly identify that CWLP is required to maintain records that identify the established control measures for each affected operation addressed by this section and must appropriately submit

copies of any updates to of this record to the Illinois EPA as specified in Conditions 7.4.9(b) (ii) and (iii). The established control measures that are currently in place are identified in the control measures record that CWLP has submitted to the Illinois EPA.

Condition 7.4.9(d)

This condition would be revised to clearly identify that these recordkeeping requirements for inspections are associated with the established control measures as identified in Condition 7.2.6(a).

Condition 7.4.9(e)

This condition would be revised to clearly identify that these recordkeeping requirements for any incidents also involve the established control measures. as identified in Condition 7.4.6(a).

**Changes in Section 7.5: Existing Coal Processing Equipment (Former Section 7.4)**

Condition 7.5.6(a)

This condition would be revised to clarify which control measures are considered to be established control measures.

Condition 7.5.8(b)

This condition would be removed from the permit because the coal crusher is located inside a building and could not be observed using Reference Method 22 or Method 9.

Condition 7.5.9(a) (ii)

This condition would be revised to clearly identify that these recordkeeping requirements for any incidents also involve the established control measures. as identified in Condition 7.5.6(a). The established control measures that are currently in place are identified in the control measures record that CWLP has submitted to the Illinois EPA.

Condition 7.5.9(b)

This condition would be revised to clearly specify that CWLP is required to maintain records of the established control measures for each affected process identified in this section of the permit and must routinely submit copies of any updates to of this record to the Illinois EPA as specified in Conditions 7.5.9(b) (ii) and (iii).

Condition 7.5.9(c)

This condition would be revised to clearly identify that these recordkeeping requirements for inspections are associated with the established control measures as identified in Condition 7.5.6(a).

**Changes In Section 7.9: Emergency Distillate Oil Fired Engine-Generators**

Condition 7.9.8(a)

This condition would be revised to no longer address routine sampling of the fuel oil used in the engines to confirm the sulfur content of the oil. As only ULSD is commercially available from suppliers, it is appropriate to rely on documentation from the fuel supplier for the sulfur content of the fuel oil.

## **CHAPTER 5 – PLANNED RENEWAL OF THE ACID RAIN PERMIT**

The Illinois EPA is proposing to renew the Acid Rain Program Permit for the Dallman Station pursuant to and consistent with Section 39.5(17)(f) of the Illinois Environmental Protection Act and Titles IV and V of the federal Clean Air Act. The renewed acid rain permit would address the four coal-fired electrical generating units that are now at this source. These units are referred to as Dallman 31, 32, 33 and 4 for purposes of the Acid Rain permit.

The renewed acid rain permit would reflect applicable regulatory requirements of the federal Acid Rain Program. As such, it would require the source to hold SO<sub>2</sub> allowances under the federal Acid Rain Program to account for SO<sub>2</sub> emissions from the affected units. An allowance is a limited authorization to emit up to one ton of SO<sub>2</sub> during or after a specified calendar year. As Dallman 31, 32 and 33 are existing units under the Acid Rain Program, the source receives annual allocations of allowances from USEPA for these units, as would be identified in the permit. The source may also participate in allowance trading with other sources to obtain additional allowances or transfer surplus allowances.

The renewed acid rain permit would also address the applicable limit under the Acid Rain Program that applies to the NO<sub>x</sub> emissions of Boiler 33 and Boiler 4, 0.40 lb/mmBtu, annual average.

The renewed acid rain permit would also address emission monitoring, recordkeeping and reporting requirements under the Acid Rain Program. The permit would not affect the source's responsibility to meet all applicable local, state, and federal requirements.

The Illinois EPA is proposing that the renewed acid rain permit would expire on May 16, 2018, when the current CAAPP permit for Dallman will expire. This will coordinate the term of the renewed permit with the remaining term of the CAAPP permit for Dallman, as is provided for by 40 CFR 72.73(b)(2). This will enable the renewal of the current CAAPP permit for Dallman and the next renewal of the acid rain permit to be processed at the same time.

## **CHAPTER 6 – SUPPLEMENTAL INFORMATION**

This chapter provides supplemental information that may assist interested individuals in understanding the revisions to the CAAPP permit for the Dallman Station that are now planned as it provides background on the current CAAPP permit for this facility and certain provisions included in the CAAPP permits issued for coal-fired power plants.

### **6.1 Summary of Emission Units and Significant Permit Requirements<sup>28</sup>**

#### **"Existing" Coal-Fired Boilers (Dallman Boilers 31, 32 and 33):**

NO<sub>x</sub> emissions from the boilers are controlled by selective catalytic reduction systems (SCR). PM emissions are controlled by electrostatic precipitators (ESP). SO<sub>2</sub> emissions are controlled by wet flue gas desulfurization (WFGD) systems. Mercury emissions are addressed by sorbent injection. CO emissions from these boilers are addressed by good combustion practices.

The boilers are subject to emission standards and limitations that address NO<sub>x</sub>, SO<sub>2</sub>, PM, CO and certain HAPs. The boilers are equipped with continuous emissions monitoring systems (CEMS) for SO<sub>2</sub> and NO<sub>x</sub> with computerized systems for collection of emission data. Continuous opacity monitoring is also required. Emissions of mercury are continuously measured using sorbent trap monitoring.

For PM, the permit requires periodic emissions testing. Testing of the boilers for PM has shown compliance with the applicable limits with significant margins of compliance. CO testing is also required for the boilers and shall be performed in conjunction with PM testing unless a CO test was completed during a prior relative accuracy test audit for the continuous emissions monitoring systems. Required testing is to be conducted at maximum seasonal operating load range and during other operating conditions that are consistent with normal operation of the boilers. In the period between emission testing, compliance is addressed by CAM plans that use monitored opacity as the indicator.

The boilers have the potential to exceed applicable State emission standards during startup and malfunction/breakdown. As provided by applicable state rules,<sup>29</sup> subject to certain terms and conditions, the permit authorizes CWLP to make certain claims related to continued operation with emissions in excess of certain applicable state emission standards during such events. The boilers operate pursuant to formal operating procedures that include procedures for startup of the boilers. The permit requires that the boilers be started up in accordance with procedures that are developed and maintained to minimize emissions during such startups.

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<sup>28</sup> This discussion does not address emission units identified as insignificant activities at this source. Insignificant activities at the source are addressed in Section 3 of the CAAPP permit.

<sup>29</sup> For Dallman Boilers 33 and 4, as they are both subject to NSPS standards, exceedances of NSPS standards during startup, shutdown and malfunction is or would be addressed in accordance with relevant provisions of the NSPS. Likewise, for Dallman Boilers 31, 32, 33 and 4, as they are subject to NESHAP standards, exceedances of NESHAP standards during startup, shutdown and malfunction is addressed in accordance with relevant provisions of the NESHAP.

In addition, upon occurrence of excess emissions during a malfunction or breakdown, CWLP must, as soon as practicable, reduce boiler load, repair the affected boiler, remove the affected boiler from service, or undertake other action so that exceedances of state emission standards cease.

CWLP must keep a variety of operational records for each boiler and its control equipment. For startup, records must be kept with the date, description, and duration of each startup. Further records are required if a startup does not progress in a routine manner to normal operation and compliance with applicable standards or if CWLP fails to follow its startup procedures.

For malfunction/breakdown events, records must be kept for each incident when operation of a boiler continued with excess emissions. These records must include the date, duration, and description of the malfunction or breakdown; the corrective actions used to reduce the quantity of emissions and the duration of the incident; information on whether opacity exceeded the applicable standard for two or more hours; whether PM or CO emissions may have exceeded the applicable standard; a detailed explanation of why continued operation of the affected boiler was necessary; the preventative measures that have been or will be taken to prevent similar malfunctions or breakdowns in the future including any repairs to the affected boilers and associated equipment; and an estimate of the magnitude of excess emissions during the incident. CWLP must also keep a maintenance and repair "log".

The provisions of the permits for notification and reporting provide a hierarchy of reports. Excess PM emissions, which would be associated with malfunction/breakdown of equipment, are followed by a written report within 15 days of the event. Extended opacity exceedances, in which the total duration of exceedances is greater than the specified duration are also to be individually reported and then followed with a more detailed written report within 15 days if they persist for more than 120 minutes (20 exceedances). CWLP is also required to submit quarterly reports that address exceedances, along with certain data from the continuous monitoring systems for SO<sub>2</sub>, NO<sub>x</sub> and opacity.

CWLP is required to provide information in the quarterly reports addressing all deviations from applicable requirements of the permit, including both emission control requirements and requirements for monitoring and recordkeeping. Such reports would also include information on the total operating hours; the greatest load achieved by each boiler; a discussion of significant changes in the fuel supply; the number, nature, and total duration of startups; information for SO<sub>2</sub>, NO<sub>x</sub>, and PM emissions and opacity; and operational information for continuous monitoring systems. These reports must include the following information for each period when emissions were in excess of an applicable limitation: the starting date, time, and duration of the excess emissions; the measured emissions rate; and a detailed explanation of the cause of the excess emissions with a discussion of the corrective actions taken to lessen the emissions. Similar information would be required in the unlikely event that CO emissions exceeded the applicable standard, as would be determined from operational data for a boiler.

For opacity and PM exceedances, the quarterly reports must also contain summary information. For each type of recurring opacity exceedance, the reports must include information addressing the effectiveness of corrective actions and the role of component failure or degradation. In addition,

these reports must provide further information for any new type(s) of opacity exceedance, including a general narrative description, a general explanation of the cause(s), a detailed explanation of the corrective actions, the effectiveness of those actions, and the likelihood of future occurrence. Other information relevant to generally explaining the number and magnitude of opacity and PM exceedances during the quarter should also be reported.

For malfunction/breakdown, CWLP must provide event-specific reports when the applicable PM emissions standard could be exceeded or where the opacity from the boiler exceeds or may have exceeded the applicable limit for more than the specified duration. A detailed follow-up report is required within 15 days.

**New Coal-Fired Boiler (Dallman Boiler 4):**

NO<sub>x</sub> emissions from this boiler are controlled by low NO<sub>x</sub> technology and selective catalytic reduction systems (SCR). PM emissions are controlled by a baghouse (BH) rather than ESPs. SO<sub>2</sub> emissions are controlled by a WFGD system. On this boiler, the WFGD system is followed by a wet ESP (WESP) to controls emissions of sulfuric acid mist and condensable particulate. CO emissions are addressed by good combustion practices.

Like the existing boilers, Boiler 4 is subject to emission standards and limitations that address NO<sub>x</sub>, SO<sub>2</sub>, PM, CO and certain HAPs. Because Boiler 4 is "new" and subject to PSD, the applicable limits for NO<sub>x</sub>, SO<sub>2</sub>, PM and CO are more stringent than those apply to the existing boilers. In addition, it is subject to limits for additional pollutants, including total PM, sulfuric acid mist and VOM. The boilers are equipped with the same continuous monitoring systems as Boilers 31, 32 and 33. In addition, continuous monitoring is conducted for PM emissions. In the CAM plans submitted for Boiler 4 by CWLP for PM emissions, data from the continuous monitor systems is used as the primary indicator.

As the revised CAAPP permit would now address Boiler 4, other aspects of the revised CAAPP permit would be similar to those for Boiler 31, 32 and 33, as already discussed.

**Coal Equipment:**

At the Dallman Station, coal is handled in a series of operations such as conveyors, transfer sites, hoppers and bunkers. Coal processing is conducted in crushers to reduce the size of the coal to meet fuel size requirements of the boilers. PM from coal-handling and coal processing is controlled by various measures including dust collection devices, natural moisture content of the coal, application of dust suppressant (includes water spray), as well as with enclosures and covers. The PM emissions from coal handling and processing are subject to an opacity limit, standards for process emission units and various regulations that address fugitive PM emissions.

For coal handling and processing, monthly inspections of control measures are to be performed while the equipment is in use. These inspections are to confirm proper implementation and the presence of these control measures to control dust (PM emissions). At least one of these monthly inspections requires that, annually, opacity testing is performed to demonstrate compliance with the PM and opacity limitations.

For both coal handling and processing, records shall be maintained for, among other things, a control measures record identifying the control measures that are being used, maintenance and repair activities, and any malfunction/breakdown of equipment. A record of each inspection must also be kept to verify compliance with the control measures requirement.

Reporting of deviations from the established control measures that last more than 12 hours shall occur within 30 days. All deviations from applicable standards or limitations need to be identified in the quarterly report submitted for the coal-fired boilers.

Based on the results of the opacity observations, the control measures that the Permittee is implementing for the material handling and processing equipment at Dallman provide a significant margin of compliance with the applicable opacity limits and ensure compliance with substantive requirements in the permit. A report for opacity observations for the Coal Handling Equipment, Coal Processing Equipment and Limestone Handling Equipment, as required by the current CAAPP permit, was submitted to the Illinois EPA in 2013, 2014 and 2015.<sup>30</sup> A total of 25 observations were completed. All observations conducted demonstrated a significant margin of compliance with the applicable opacity limits in 35 IAC 212.123 and 40 CFR 60 Subpart Y.<sup>31</sup> Based on observed opacity, the control measures identified in the Control Measures Record are sufficient to reasonably ensure continuous compliance.

#### **Fly Ash Equipment:**

At the Dallman Station, fly ash is handled in a series of operations such as enclosed piping, hoppers and silos. Fly ash is generated as a waste product from the combustion of coal. PM from fly ash processing is controlled by various measures including dust collection devices as well as with enclosures and covers. The PM emissions from fly ash processing are subject to an opacity limit, standards for process emission units and various regulations that address fugitive PM emissions.

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<sup>30</sup> The opacity observations were conducted by plant personnel certified in accordance with Reference Method 9 to make opacity observations.

<sup>31</sup> 35 IAC 212.123 requires that opacity of emissions from all of these units not exceed 30 percent. Opacity of emissions from certain units that are also subject to 40 CFR Part 60 Subpart Y must be less than 20 percent. The BACT determination for the Dallman 4 Project requires that the opacity from certain units must not exceed 10 percent.

A total of 23 opacity observations were completed for units subject to only 35 IAC 212.123. There were only five with opacity greater than zero, the highest of which was 5 percent. All units were in compliance.

Two opacity observations were completed for units that are also subject to 40 CFR Part 60 Subpart Y. Opacity was observed from a building enclosing multiple emission points. Because opacity would be associated with fugitive emissions that could be from any equipment inside, the lowest applicable opacity limit (less than 20 percent) was used to determine compliance. The opacity observed for each observation point was zero and all units were in compliance.

The coal handling operations at which more than zero percent opacity was observed were coal unloading from trucks and transfer of coal onto the storage pile. Seven 6-minute averages were taken for the truck unloading, three at zero and four with less than 1.0 percent opacity. For transfer of coal to the storage pile, six 6-minute averages were taken, four with zero opacity, one with opacity of 1.250, and one with opacity of 0.625 percent. These opacity observations indicate that the control measures being used by CWLP are fully sufficient to comply with this standard.

For fly ash processing, monthly inspections of control measures are to be performed while the equipment is in use with the exception of fly ash loadout equipment, which must be inspected at least weekly. These inspections are to confirm proper implementation and the presence of these control measures to control dust (PM emissions). At least one of these monthly inspections requires that, annually, opacity testing is performed to demonstrate compliance with the PM and opacity limitations. At least one of these weekly inspections requires that, quarterly, opacity testing is performed to demonstrate compliance with the PM and opacity limitations.

Records must be maintained for, among other things, a control measures record identifying the control measures that are being used, maintenance and repair activities, and any malfunction/breakdown of equipment. A record of each inspection must also be kept to verify compliance with the control measures requirement.

Reporting of deviations from the established control measures that last more than 12 hours must occur within 30 days. All deviations from applicable standards or limitations need to be identified in conjunction with quarterly reports submitted for the coal-fired boilers.

#### **Limestone and Gypsum Equipment:**

At the Dallman Station, bulk limestone and gypsum are handled in conjunction with the operation of the SO<sub>2</sub> scrubbers on the boilers. PM emissions are controlled by various control measures including moisture content of limestone and gypsum as well as enclosures.

Regular inspections of control measures are required of the operation while the equipment is in use. Opacity observations shall be performed at least annually. Such observations are only required for equipment from which visible emissions, i.e., any visible emission, are normally observed. All units must also undergo PM testing at the request of the Agency.

CWLP must keep records of, among other things, the specific control measures that are used, operational data, required inspections, and times when the control measures are not utilized.

Reporting of an extended deviation from the identified control measures, generally more than two and twelve hours respectively, shall occur within 30 days. All deviations from applicable permit requirements shall be addressed in the quarterly report accompanying the report for the coal-fired boilers.

PM emissions associated with Boiler 4 emission units that handle material that is wet (high moisture content), such as coal, bottom ash, limestone and gypsum, will be minimized because the material is moist. PM emissions from the units that handle dry materials will be controlled by various measures including enclosures and covers, application of water and dust suppressants, and dust collection devices.

CWLP must conduct monthly inspections and observations for visible emissions, as detailed in the permit, for the specific purpose of verifying that the measures identified in a site-specific written operating program and any other measures required to control emissions are being properly implemented. Inspections of internal components of dust collection devices must be conducted while the device is out of service. These inspections must be completed every 9 months for fly ash control devices and every 15

months for all other control devices. Records must be maintained for all required inspections and observations.

CWLP must also maintain records and documentation that demonstrate compliance with emission limitations in the permit. Notification must be provided within 30 days of any deviations of emission standards that continue for more than 24 hours. Deviations of emission standards and operations requirements in the permit must also be provided in quarterly reports

Based on observed opacity from the limestone handling equipment, as detailed in Section 6.1.2 above, the control measures for this equipment are sufficient to reasonably ensure continuous compliance.

#### **Cooling Tower:**

CWLP operates a cooling tower for Boiler 4. The cooling tower is a source of particulate emissions because of minerals present in the circulation water, which are emitted to the atmosphere due to water droplets that escape from the cooling tower or completely evaporate. The emissions of PM are controlled by drift eliminators, which collect the water droplets entrained in the air that passes through the cooling tower.

The drift eliminators on the cooling tower must be operated in accordance with written operating procedures. The procedures must address good Air Pollution Control Practices. The circulation water through the cooling tower must be sampled and analyzed for total dissolved solids on at least a monthly basis.

CWLP must maintain records of such sampling and analysis to demonstrate compliance with the established PM emission limitations as well as inspections and maintenance logs for the cooling tower and drift eliminators.

#### **Engines:**

CWLP has three diesel engine generators for backup power to meet various on-site needs for electricity in the event of disruptions in the plant's internal power system. A fourth diesel engine is used to power an emergency fire pump that provides fire protection to structures and equipment. These engines are fired with distillate fuel oil, which is the only fuel allowed to be used.

Opacity observations are required to be performed every 500 hours of operation and annually for the fire pump engine. Opacity observations must also be performed upon written request from the Illinois EPA. Routine sampling and analysis is required to demonstrate compliance with the SO<sub>2</sub> limitations in the permit.

CWLP must keep a record of, among other things, operation of engines, fuel shipment records, total fuel used, and emission calculations.

Reporting of an extended deviation from the identified control measures, generally more than two and twelve hours respectively, shall occur within 15 days. All deviations from applicable permit requirements shall be addressed in the quarterly report accompanying the report for the coal-fired boilers.

**Gasoline Storage:**

CWLP maintains a gasoline storage tank for fueling of plant vehicles. The tank must use a permanent submerged loading pipe to minimize emissions of volatile organic material from the transfer of gasoline into the tank.

Annual inspections of the tank are required. Appropriate records must be kept to show compliance with applicable requirements. CWLP must report significant deviations from the applicable permit requirement, i.e., failure of the submerged loading within 30 days and any other deviations with the quarterly reports for the coal-fired boilers.

**Roadways and Other Open Area Sources of Fugitive Dust:**

CWLP must address fugitive particulate emissions from roadways, parking areas and other open areas at the station. These emissions are controlled by paving and work practices, such as flushing, vacuuming and dust suppression, which prevent the generation and emissions of particulate matter.

CWLP must maintain a written operating program describing the measures being implemented to control fugitive particulate emissions from each unit with the potential to generate significant quantities of such emissions.

CWLP must conduct compliance observations for opacity from all affected units on at least a quarterly basis to verify opacity levels and confirm the effectiveness of the written operating program in controlling emissions.

CWLP must also conduct monthly inspections in accordance with the CAAPP permit for the specific purpose of verifying that measures identified in the written operating program are being properly implemented. Records of all observations and inspections must be maintained.

CWLP must report emissions of particulate matter in excess of specified limits within 30 days of such occurrence. Quarterly reports of deviations must be submitted.

## **6.2 Discussion of Reporting Required by CAAPP Permits**

The effectiveness of the CAAPP relies in part upon accurate and timely reporting by sources. The Illinois EPA, USEPA, and the public rely on reports submitted by sources for information about the compliance status of sources and to help guide their investigations and actions. CAAPP permits generally contain four types of reporting requirements to address and facilitate compliance with applicable requirements. CAAPP permits contain "regulatory" reporting requirements that are carried over from applicable state and federal rules. CAAPP permits require prompt reporting of any deviations that occur from the applicable requirements in the permit. CAAPP permits also require reports on the monitoring that is required under the permit. Finally, CAAPP permits require annual compliance reports or "compliance certifications" in which a source must report on its compliance status during the preceding calendar year. These four types of reporting are all present in the CAAPP permit for the Dallman Station.

## **6.3 Discussions of Start-up and Malfunction/Breakdown**

As related to state emissions standards under Illinois' State Implementation Plan (SIP), this CAAPP permit addresses excess emissions during startups or periods of malfunction or breakdown in a manner that is consistent with the SIP. 35 IAC 201.149, which is currently part of Illinois' SIP,<sup>32</sup> prohibits continued operation of an emission unit during malfunction or breakdown of the unit or associated air pollution control equipment, or startup of an emission unit or associated air pollution control equipment, if such operation would cause a violation of an applicable state emission standard or limitation absent express permit authorization.<sup>33</sup>

The provisions governing such permit authorizations are in 35 IAC Part 201 Subpart I, which is also part of Illinois' SIP. These provisions make clear that the process in Illinois for addressing compliance with state emission standards during malfunction/breakdown and startup is in two steps. The first step, as set forth at 35 IAC 201.261, consists of a source seeking authorization by means of a permit application to make a future claim of malfunction/breakdown or startup.<sup>34</sup> Absent a request for authorization in a permit application, followed by the express grant of such authorization in an issued permit, a source cannot make a claim of malfunction/breakdown or startup under Illinois rules in the event of a future exceedance of a state emission

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<sup>32</sup> USEPA has issued a "SIP Call" that requires Illinois, as well as other states to, to remove or appropriately revise provisions that potentially act as an obstacle to enforcement for violations of emission limits in the SIP that occur during startup, shutdown or malfunction.

<sup>33</sup> 35 IAC 201.149 and 35 IAC Part 201 Subpart I only address violations of state emission standards and limitations, as found in 35 IAC Subtitle B: Air Pollution, Chapter I: Pollution Control Board, Subchapter c: Emission Standards and Limitations for Stationary Sources. "Subchapter c" includes Illinois emissions standards for various pollutants, including particulate emissions (35 IAC Part 212), SO<sub>2</sub> emissions (35 IAC Part 214), and NO<sub>x</sub> emissions (35 IAC Part 217).

<sup>34</sup> Pursuant to 35 IAC 201.261, a request related to malfunction/breakdown should include an explanation of why continued operation is necessary; the anticipated nature, quantity and duration of emissions; and measures that will be taken to minimize the quantity and duration of emissions. A request related to startup should include a description of the startup procedure, duration, and frequencies of startups, type, and quantity of emissions during startups and efforts to minimize emissions, duration, and frequency.

standard during such periods. These regulatory provisions are specifically recognized by the CAAPP, pursuant to Section 39.5(5)(s) of the Act.

The second step in Illinois' process related to excess emissions during malfunction/breakdown or startup, as addressed by 35 IAC 201.262, addresses the showing that a source must make for a viable claim of malfunction/breakdown or startup. For malfunction/breakdown, this showing consists of a demonstration that continued operation was necessary to prevent injury to persons or severe damage to equipment, or was required to provide essential services. For startup, this showing consists of a demonstration that all reasonable efforts have been made to minimize emissions from the startup event, to minimize the duration of the event, and to minimize the frequency of such events. In some respects, this showing for startups may be evaluated based on past practice when considering whether a permit should provide authorization to make claims related to startup. However, this showing also continues to be relevant on an ongoing basis, like the showing required for malfunction/breakdown events, which may never actually occur. This is because the showing for startups also relates to future activities whose exact circumstances are not known.

For certain emission units at the Dallman Station, malfunction and breakdown and/or startup authorization is already provided under Illinois' rules. CWLP has also requested such authorizations for Dallman Boiler 4. The relevant CAAPP application contained the applicable forms and provided the relevant information specified by the applicable state rules. The Illinois EPA reviewed these requests and granted authorization to the source in the CAAPP permit to make claims of malfunction and breakdown and/or startup, as appropriate. The issued CAAPP permit clearly sets forth the emission units, types of authorization provided (i.e., malfunction/breakdown and/or startup), and the requirements that have been imposed in conjunction with such authorizations.

These authorizations in the CAAPP permit do not equate to an "automatic exemption" from otherwise applicable state emission standards. The grant of initial authorizations for violations of state emission standards during startup and certain malfunctions and breakdowns was and, for Dallman 4, will be fully consistent with long standing practice in Illinois for permitting and enforcement. Due to the nature of power plants and the inability to simply shutdown coal-fired boilers and the nature of the start-up of coal-fired boilers, excess emissions may occur during startup or malfunction and breakdown that the source cannot readily anticipate or reasonably avoid. However, as the source should be fully aware, it may be held accountable for any excess emissions that occur regardless of any authorization in the CAAPP permit related to malfunction and breakdown events and startup.

In summary, the provisions in the SIP and the CAAPP permit that delineate the elements for a viable claim of malfunction/breakdown or startup do not translate into any advance determination related to actual occurrences of excess emissions. Rather, together they provide a framework whereby a source is provided with the ability to make a claim of malfunction/breakdown or startup, with the viability of any such claim subject to specific review against the relevant requirements. In this regard, 35 IAC 201.265 clearly states that violating an applicable state standard even if consistent with any express authorization regarding malfunction/breakdown or startup in a permit shall only constitute a prima facie defense to an enforcement action for the violation of such standard. The provisions in the CAAPP permit related to malfunction and breakdown and startup do not provide any shield from state emission standards that may be violated during such events. Any excess

emissions during these events would constitute violations and potentially be the subject of enforcement actions.

### **6.5 Incorporation by Reference**

Based on USEPA guidance, as found in USEPA's White Paper 2<sup>35</sup> and petition responses by the Administrator of USEPA, Title V permit authorities may, within their discretion, incorporate required plans into a Title V by reference. As recognized in *White Paper 2*, permit authorities can effectively streamline the contents of a Title V permit, avoiding the clutter of restated text. However, it is also recognized that the benefits of incorporation of plans must be carefully balanced by a permit authority with its duty to issue permits in a way that is "clear and meaningful" to the Permittee and the public.

As related to incorporation by reference, USEPA guidance stresses the importance of identifying, *with specificity*, the object of the incorporation.<sup>36</sup> Accordingly, for conditions in CAAPP permits that incorporate plans, the general practice of the Illinois EPA is to briefly describe the subject plan and manner in which it applies to the source. Identifying the nature of the source activity, the regulatory requirements or the nature of the equipment associated with the plan is consistent with recommendation of *White Paper 2*. The actual contents of plans are not restated in the permit, as this would plainly defeat the purpose of incorporating material by reference, as recognized by relevant USEPA guidance.

Due to changing circumstance or by the underlying rule or requirement, Plans need to be revised from time to time. Except where expressly precluded by the relevant rules, the CAAPP Permit allows CWLP to make future changes to plans without undergoing formal permit revision procedures. This approach will allow flexibility to make required changes to a plan without separately applying for a revised permit and, similarly, will lessen the impacts that could result for the Illinois EPA if any change to a plan required a permitting transaction. When revised plans are submitted to the Illinois EPA during the permit term, changes to the incorporated plans are automatically incorporated into the CAAPP Permit unless the Illinois EPA makes a written objection.

### **6.6 Periodic Monitoring**

Pursuant to Section 504(c) of the Clean Air Act, Illinois' CAAPP permit must set forth monitoring requirements, commonly referred to as "Periodic Monitoring", to assure compliance with the applicable emission standards, emission limits and other substantive requirements of the permit. As a general

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<sup>35</sup> Memorandum, *White Paper Number 2 for Improved Implementation of The Part 70 Operating Permits Program*, March 5, 1996, Lydia N. Wegman, Deputy Director, Office of Air Quality Planning and Standards, USEPA, to Directors, Air Regional Offices, USEPA.

<sup>36</sup> The Order provides that permit authorities must ensure the following: "(1) referenced documents be specifically identified; (2) descriptive information such as the title or number of the document and the date of the document be included so that there is no ambiguity as to which version of the document is being referenced; and (3) citations, cross references, and incorporations by reference are detailed enough that the manner in which any referenced material applies to a facility is clear and is not reasonably subject to misinterpretation." See, Petition Response, p. 43, citing White Paper 2, p 37.

matter, the required content of a CAAPP Permit with respect to such Periodic Monitoring is addressed in Section 39.5(7) of the Act.<sup>37</sup> Section 39.5(7) (b) of the Act<sup>38</sup> provides that in a CAAPP Permit:

The Agency shall include among such conditions applicable monitoring, reporting, record keeping and compliance certification requirements, as authorized by paragraphs d, e, and f of this subsection, that the Agency deems necessary to assure compliance with the Clean Air Act, the regulations promulgated thereunder, this Act, and applicable Board regulations. When monitoring, reporting, record keeping and compliance certification requirements are specified within the Clean Air Act, regulations promulgated thereunder, this Act, or applicable regulations, such requirements shall be included within the CAAPP Permit.

Accordingly, the scope of the Periodic Monitoring that must be included in a CAAPP Permit is not restricted to monitoring requirements that were adopted through rulemaking or imposed through permitting. When applicable regulatory emission standards and control requirements or limits and control requirements in relevant Title I permits are not accompanied by compliance methodologies, it is necessary for monitoring requirements to be established in a CAAPP Permit.<sup>39</sup> Monitoring requirements must also be established when standards and control requirement are accompanied by compliance methodologies but those methodologies are not adequate to assure compliance with the applicable standards or requirements. For this purpose, the requirements for Periodic Monitoring in a CAAPP Permit may include requirements for emission testing, emissions monitoring, operational monitoring, non-instrumental monitoring, and recordkeeping for each emission unit or group of similar units at a facility, as required by rule or permit, as appropriate or as needed to assure compliance with the applicable substantive requirements. Various combinations of monitoring measures will be appropriate for different emission units depending on their circumstances, including the substantive emission standards, limitations and control requirements to which they are subject.

What constitutes sufficient Periodic Monitoring for particular emission units, including the timing or frequency associated with such Monitoring requirements, must be determined by the permitting authority based on its knowledge,

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<sup>37</sup> The provisions in the Act for Periodic Monitoring in CAAPP permits reflect parallel requirements in the federal guidelines for State Operating Permit Programs, 40 CFR 70.6(a)(3)(i)(A), (a)(3)(i)(B), and (c)(1).

<sup>38</sup> Section 39.5(7)(d)(ii) of the Act further provides that a CAAPP Permit shall:

Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), require Periodic Monitoring sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit ...

Section 39.5(7)(p)(i) of the Act also provides that a CAAPP permit shall contain "Compliance certification, testing, monitoring, reporting and record keeping requirements sufficient to assure compliance with the terms and conditions of the permit."

<sup>39</sup> The classic example of regulatory standards for which Periodic Monitoring requirements must be established in a CAAPP permit are state emission standards that pre-date the 1990 Clean Air Act Amendments that were adopted without any associated compliance procedures. Periodic Monitoring must also be established in a CAAPP permit when standards and limits are accompanied by compliance procedures but those procedures are determined to be inadequate to assure compliance with those requirements.

experience and judgment.<sup>40</sup> For example, as Periodic Monitoring must collect representative data, the timing of Monitoring requirements need not match the averaging time or compliance period of the associated substantive requirements, as set by the relevant regulations and permit provisions. The timing of the various requirements making up the Periodic Monitoring for an emission unit is something that must be considered when those Monitoring requirements are being established. For this purpose, Periodic Monitoring often consists of requirements that apply on a regular basis, such as routine recordkeeping for the operation of control devices or the implementation of the control practices for an emission unit. For certain units, this regular monitoring may entail "continuous" monitoring of emissions, opacity or key operating parameters of a process or its associated control equipment, with direct measurement and automatic recording of the selected parameter(s). As it is infeasible or impractical to require emissions monitoring for many emission units, instrumental monitoring is more commonly conducted for the operating parameters of an emission unit or its associated control equipment. Monitoring for operating parameter(s) serves to confirm proper operation of equipment, consistent with operation to comply with applicable emission standards and limits. In certain cases, an applicable rule may directly specify that a particular level of an operating parameter be maintained, consistent with the manner in which a unit was being operated during emission testing. Periodic Monitoring may also consist of requirements that apply on a periodic basis, such as inspections to verify the proper functioning of an emission unit and its associated controls.

The Periodic Monitoring for a unit may also include measures, such as emission testing, that would only be required once or only upon specific request by the Illinois EPA. These requirements are typically accompanied by monitoring requirements would apply on a regular basis. When emission testing or other measure is only required upon request by the Illinois EPA, it is included as part of the Periodic Monitoring for an emission unit to facilitate a response by the Illinois EPA to circumstances that were not contemplated when Monitoring was being established, such as the handling of a new material or a new mode of operation. Such monitoring would also serve to provide further verification of compliance, along with other potentially useful information. As emission testing provides a quantitative determination of compliance, it would also provide a determination of the margin of compliance with the applicable limit(s) and serve to confirm that the Monitoring required for an emission unit on a regular basis is reliable and appropriate. Such testing might also identify specific values of operating parameters of a unit or its associated control equipment that accompany compliance and can be relied upon as part of regular Monitoring.

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<sup>40</sup> The test for the adequacy of "Periodic Monitoring" is a context-specific determination, particularly whether the provisions in a Title V permit reasonably address compliance with relevant substantive permit conditions. 40 CFR 70.6(c)(1); see also 40 CFR 70.6(a)(3)(i)(B); see also, *In the Matter of CITGO Refinery and Chemicals Company L.P.*, Petition VI-2007-01 (May 28, 2009); see also, *In the Matter of Waste Management of LA. L.L.C. Woodside Sanitary Landfill & Recycling Center, Walker, Livingston Parish, Louisiana*, Petition VI-2009-01 (May 27, 2010); see also, *In the Matter of Wisconsin Public Service Corporation's JP Pulliam Power Plant*, Petition V-2009-01 (June 28, 2010).

## Attachment 1 - Other Planned Changes by Minor Modification

### Introduction

In parallel with the reopening proceeding and the modifications to the permit by significant modification, the Illinois EPA is also planning to make certain revisions to the CAAPP permit by minor modification. These changes would be made to remove outdated language, improve language, or correct language. Pursuant to Section 39.5(14)(a) of the Act, the planned changes listed below are all minor modifications.<sup>41</sup> Pursuant to Section 39.5(14)(a)(v) of the Act, the Illinois EPA may not issue a revised CAAPP permit by minor modification until after a 45-day period for USEPA review has passed or USEPA has notified the Illinois EPA that it will not object to the issuance of the revised permit, whichever comes first. However, the Illinois EPA can approve the permit modification prior to that time. Pursuant to Section 39.5(14)(a)(vi) of the Act, the source may make the change proposed in its minor permit modification application immediately after it files such application. After the source makes the changes, and until the Illinois EPA takes final action, the source must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this period, the source need not comply with the existing permit terms and conditions that it seeks to modify. If the source fails to comply with its proposed permit terms and conditions during this period, the relevant existing permit terms and conditions may be enforced. Pursuant to Section 39.5(14)(a)(vii) of the Act, changes that are minor modifications are not covered by any permit shield pursuant to Section 39.5(7)(j) of the Act.

### Use of the Term "Permittee"

In various places in the CAAPP permit, the phrase "owner or operator" would be replaced with "the Permittee." This would be done to conform to current terminology in CAAPP permits for provisions where the Permittee would be the owner or operator or "responsible party." These changes would not be made in circumstances where the owner or operator is still proper because it may differ from the Permittee in certain circumstances related to liability, e.g. in certain provisions addressing the Acid Rain Program (Section 6.1). These changes of "owner or operator" to "Permittee" are not individually discussed.

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<sup>41</sup> The Act defines "minor permit modification" to mean a permit modification as listed in Section 39.5(14)(a)(i) of the Act. All the planned minor modification changes to the CAAPP permit for this source are not administrative amendments and meet the following criteria:

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject (i.e., a federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Clean Air Act; and an alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the Clean Air Act);
- Are not modifications under any provision of Title I of the Clean Air Act; and
- Are not required to be processed as a significant modification.

**Changes in Section 3.0:**

Condition 3.2 and 3.2.4

Condition 3.2 would be revised due to changes made to the source-wide applicable requirement in Condition 5.2.2 (refer to the description of changes proposed to Condition 5.2.2 for further explanation). Insignificant activities are subject to the opacity standard in 35 IAC 212.123(a); therefore, Condition 3.2.4 would be added to explicitly state this.

**Changes in Section 4 of the Permit:**

The emission units in the first column of the table would be updated to be consistent with changes elsewhere in the permit.

**Changes in Section 5 of the Permit: Overall Source Conditions**

Condition 5.2.2(b)

The applicability of opacity standards in 35 IAC 212 would be moved from the source wide applicable regulations section of the permit to the unit-specific conditions in Section 7 of the permit. This would more clearly identify the specific opacity standard applicable to subject emission units.

Condition 5.3.1

The title for this condition would be updated to clarify that the requirements for submittal of fees is a "State Requirement Only"

**Changes in Section 7.1: Coal-Fired Boilers 31 and 32**

Condition 7.1.3(a)

This condition would be revised to clarify that the "affected boilers" are also referred to as "affected sources" or "EGUs" in this section of the permit.

Condition 7.1.3(c)

An error in the rules cited in this condition would be corrected, replacing 35 IAC 212.203 with 35 IAC 212.202.

Condition 7.1.4(a)

This condition would be revised due to the revisions to source-wide condition 5.2.2(b) and to more completely cite 35 IAC 212.123, the applicable standard for the opacity of emissions from Boilers 31 and 32.

Current Condition 7.1.7(e)

This condition would be removed from the permit because it would be redundant due to the addition of Condition 7.1.4(f).

Condition 7.1.4(e) (ii) (B)

This condition would be revised to correct the identified origin and authority in 35 IAC 217.708.

Condition 7.1.5(a)

For this condition, which addresses the incidental use of natural gas by these boilers, the origin and authority for the condition was added, i.e., Section 39.5(7) (a) of the Act. The absence of this information was an oversight in the

initial CAAPP permit. This change responds to a suggestion made by the USEPA for a preliminary draft of a revised CAAPP permit.

Condition 7.1.5(c)

This condition would be reworded to clarify that a CAM plan is not required for Boilers 31 and 32 for Acid Rain Program requirements.

Condition 7.1.5(d)

This condition would be revised to clarify that CAM does not apply to Boiler 31 and 32 for state rules for SO<sub>2</sub> and NO<sub>x</sub>. Cross-references to conditions that contain the applicable emission limitations for SO<sub>2</sub> and NO<sub>x</sub> would also be added for clarity.

Condition 7.1.5(e)

This condition would be revised to clarify that a CAM plan is not needed for Boiler 31 or 32 for CO. Cross-references to conditions that contain the applicable emission limitations for CO would also be added for clarity.

**Changes in Section 7.2: Coal-Fired Boiler 33**

Condition 7.2.3(a)

This condition would be revised to include language from applicable regulations that clarify the "affected boiler" is also an "affected source" or an "EGU" depending on the origin of regulatory requirements.

Condition 7.2.3(b)

Cross-reference to Condition 7.2.4(d) for SO<sub>2</sub> emissions and Condition 7.2.4(e) for NO<sub>x</sub> emissions would be removed from this condition because these emission standards would be removed from the permit (Refer to changes proposed for these conditions for additional justification).

Condition 7.2.4(a) (iv)

The origin and authority from the Act would be corrected in this condition. Cross-reference to the appropriate conditions which contain the applicable NSPS emission standards would be added.

Condition 7.2.4(d)

This condition would be removed from the permit because the SO<sub>2</sub> limitation imposed by 35 IAC 214.121 has been invalidated.

Conditions 7.2.4(e) (ii) (B) and (C)

This condition would be revised to correct the identified origin and authority, as 35 IAC 217.708.

Current Condition 7.2.4(f)

This condition would be removed from the permit because the NO<sub>x</sub> limitation imposed by 35 IAC 217.121 on Boiler 33 has been repealed and was removed from 35 IAC 217 on August 31, 2009.

Condition 7.2.5(b)

For this condition, which addresses the incidental use of natural gas by the boiler, the origin and authority for the condition would be added, i.e., Section 39.5(7) (a) of the Act. The absence of this information was an oversight in the initial CAAPP permit. This change responds to a suggestion made by the USEPA for a preliminary draft of a revised CAAPP permit.

Condition 7.2.5(b) (i)

This condition would be revised to no longer address 35 IAC 217.121 because this rule has been repealed.

Condition 7.2.5(d)

This condition would be reworded to clarify that a CAM plan is not required for Boiler 33 for Acid Rain Program requirements.

Condition 7.2.5(e)

This condition would be revised to clarify that CAM does not apply to Boiler 33 for applicable NSPS and state rules for SO<sub>2</sub> and NO<sub>x</sub>. Cross-references to conditions that contain the applicable emission limitations would also be added for clarity.

Condition 7.2.5(f)

This condition would be revised to clarify that CAM does not apply to Boiler 33 for state rules for CO. Cross-references to conditions that contain the applicable emission limitation would also be added for clarity.

Condition 7.2.6(b)

This condition would be revised to more accurately cite the regulatory requirement and clarify the "at all times" includes periods of startup, shutdown and malfunction.

**Changes in Section 7.4: Existing Coal Handling Equipment**

Condition 7.4.1 - Note

To avoid possible misunderstanding, a note would be added to this general descriptions of these emission units in the permit explicitly stating that this description is only for informational purposes and do not establish any requirements or limitations.

Condition 7.4.4(b)

This condition would be revised to more fully set forth the opacity standard that applies to the affected processes addressed in this section. This information is currently provided in a source-wide standard in Condition 5.2.2(b) but would be provided in this condition to improve clarity.

Condition 7.4.4(c)

This condition would be revised to correct the origin and authority to 40 CFR 60.252(b) and to clarify which affected operations addressed in this section are subject to 40 CFR 60 Subpart Y and the related requirements in 40 CFR 60 Subpart A.

Condition 7.4.10(a) (iii) (A)

This condition would be revised to clarify that notifications of certain deviations related to coal handling must be submitted with quarterly reports required for the coal-fired boilers.

**Changes in Section 7.5: Existing Coal Processing Equipment**

Condition 7.5.1 - Note

To avoid possible misunderstanding, a note would be added to this general description of these units explicitly stating that this description is only for informational purposes and does not establish any requirements or limitations.

Condition 7.5.4(b)

This condition would be revised to more fully set forth the opacity standard that applies to the affected processes addressed in this section. This information is currently provided in a source-wide standard in Condition 5.2.2(b) but would be provided in this condition to improve clarity.

Condition 7.5.4(c)

This condition would be revised to more precisely cite the regulatory standard in 35 IAC 212.321.

Condition 7.5.4(d)

This condition would be revised to clarify the affected processes addressed in this section that are subject to 40 CFR 60 Subpart Y. The condition would also be revised to correctly cite the origin and authority for the cited opacity standard.

Condition 7.5.10(a) (iii)

This condition would be revised to clarify that notifications of certain deviations related to coal processing must be submitted with quarterly reports for the coal-fired boilers.

**Changes in Section 7.6: Existing Limestone and Gypsum Handling, Processing and Storage Equipment**

Condition 7.6.1 - Note

To avoid possible misunderstanding, a note would be added to this general description of these units explicitly stating that this description is only for informational purposes and does not establish any requirements or limitations.

**Changes in Section 7.9: Emergency Distillate Oil Fired Engine-Generators**

Condition 7.9.1 - Note

To avoid possible misunderstanding, a note would be added to this general descriptions of these engines explicitly stating that this description is only for informational purposes and do not establish any requirements or limitations.

Condition 7.9.4(a)

This condition would be revised to more fully set forth the requirements of 35 IAC 212.123, the state opacity standard that applies to the engines addressed in this section. This information is currently provided in a source-wide standard in Condition 5.2.2(b) but would be provided in this condition to improve clarity.

**Changes in Section 7.11: Gasoline Storage Tank**

Condition 7.11.1 - Note

To avoid possible misunderstanding, a note would be added to this general descriptions of the gasoline storage tank explicitly stating that that this description is only for informational purposes and does not establish any requirements or limitations.

Condition 7.11.2

The description of this tank was corrected to indicate that the capacity of the gasoline tank currently installed at the facility is 500 gallons.

Condition 7.11.5(b)

This condition would be revised to indicate that the gasoline tank does not require a CAM Plan because the tank does not use add-on controls to achieve compliance with any applicable emissions limitations.

Condition 7.11.9(b)

This condition would be revised to clarify that notifications of certain deviations related to gasoline storage must be submitted with the quarterly reports for the coal-fired boilers.

**Changes in Section 9.0: Standard Permit Conditions**

Condition 9.8

The requirement to submit annual compliance certifications to USEPA would be removed. This is because such submissions are no longer required by USEPA.

## **Attachment 2 - Other Changes by Administrative Amendment**

### **Introduction**

In parallel with this reopening proceeding and the modifications to this CAAPP permit by significant modification, a number of changes to the permit would also occur by administrative amendment. Descriptions of these changes, other than changes to correct errors in grammar or punctuation, are provided below.

These changes would all be administrative changes to the permit pursuant to Section 39.5(13) of the Act.<sup>42</sup> Accordingly, neither notice nor an opportunity for review and comment by the public or affected States is required for these changes to the permit, provided that these revisions are designated as having been made pursuant to the CAAPP's procedures for administrative amendments to CAAPP permits. The Permittee may also implement the changes addressed in its request for an administrative amendment of the permit immediately upon submittal of the request. These changes are not covered by any permit shield pursuant to Section 39.5(7)(j) of the Act.

### **Changes in Terminology throughout the Permit:**

For consistency, "USEPA Reference Test Methods" will be addressed as "Reference Methods" throughout the permit. Appropriate changes will be made to conditions of the current permit that refer to "USEPA Methods" or "Test Methods."

### **Section 5: Overall Source Conditions**

#### Current Condition 5.3

This "condition," entitled "General Non-Applicability of Regulations of Concern," will be removed instead of indicating "None."<sup>43</sup>

#### Current Condition 5.4

This condition, entitled "Source-Wide Operational and Production Limits and Work Practices," will be removed instead of indicating "None."

#### Condition 5.8

This condition, entitled "General Operational Flexibility/Anticipated Operating Scenarios," will be removed instead of indicating "None."

### **Section 7.1: Coal-Fired Boilers 31 and 32**

The title of Section 7.1 will be revised to indicate that this section addresses Dallman Boilers 31 and 32.

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<sup>42</sup> Section 39.5(13) of the Act defines "administrative permit amendments" as a permit revisions that can accomplish one or more of the changes listed in Section 39.5(13)(c) of the Act. The planned administrative changes to the CAAPP permit for this source fall into the following categories: Correct typographical errors; identify a change in the name, address, or phone number of any person identified in the permit, or provide a similar minor administrative change at the source; or any other type of change which has been determined to be similar to those above.

<sup>43</sup> The conditions of the permit that contain nonapplicability statements are also entitled "Nonapplicability Provisions" rather than "Nonapplicability of Regulations of Concern."

### **Section 7.2: Coal-Fired Boiler 33**

The title of this section will be revised to indicate that this section addresses Dallman Boiler 33.

### **Section 7.4: Existing Coal Handling Equipment**

The title of this section will be revised to indicate that this section addresses "existing" coal handling equipment, i.e., equipment that existed before the Dallman 4 Project and was not modified as part of this project.

### **Section 7.5: Existing Coal Processing Equipment**

The title of this section will be revised to indicate that this section addresses "existing" coal processing equipment.

### **Section 7.6: Existing Limestone and Gypsum Equipment**

The title of this section will be revised to indicate that this section of addresses "existing" limestone and gypsum equipment.

### **Section 7.9: Emergency Distillate Oil Fired Engine-Generators**

The title of this section will be revised to indicate that this section of addresses Emergency Distillate Oil Fired Engine-Generators. The title of this section is currently simply "Engines." This change will distinguish these units from the fire pump engine addressed in new Section 7.10 of the permit

### **Section 7.11: Gasoline Storage Tank**

#### **Condition 7.11 - Title and 7.11.1**

The title of Section 7.11 and Condition 7.11.1 will be revised to specifically indicate that this section as addresses to gasoline storage.

#### **Condition 7.11.7**

This condition, entitled "Testing Requirements," will be removed instead of listing "None".

### **Section 8.0:**

#### **Condition 8.6.4(b) (ii)**

This condition will be revised to identify the new address of the Illinois EPA Air Regional Office in Peoria, Illinois.