

217/785-1705

"REVISED"  
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

City of Springfield  
Attn: P. J. Becker, Environmental Health and Safety Manager  
Seventh and Monroe  
Springfield, Illinois 62757

Application No.: 95090091 I.D. No.: 167120AAO  
Operation of: City, Water, Light and Power (CWLP) - Dallman Station  
Date Issued: September 29, 2005 Initially Effective: May 16, 2013  
Expiration Date:<sup>1</sup> May 16, 2018  
Source Location: 3100 Stevenson Drive, Springfield (Sangamon County)  
Responsible Official: P. J. Becker/Environmental Health & Safety Manager

Permit Authorization:

This revised CAAPP permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Revision: Reopening for Cause  
Date Revised Permit Issued: TBD

This permit authorization has been provided for the revisions to this CAAPP permit, as further described in the statement of basis that accompanied the draft of this revised permit, that have been made by the procedures for "reopening of CAAPP permits for cause" at Section 39.5(15)(a) and (c) of the Illinois Environmental Protection Act. These revisions make changes to the CAAPP permit to address new applicable requirements for emission units covered by the permit, which requirements have become applicable to these units since the issuance of the initial CAAPP permit. In addition, certain requirements that are no longer applicable to these units have been removed from the permit.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil  
Acting Manager, Permit Section  
Division of Air Pollution Control

REP:MTR:DR:psj

cc: USEPA

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<sup>1</sup> This CAAPP permit expires on May 16, 2018 except as addressed in Condition 8.7 of this permit.

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Expiration Date:<sup>2</sup> May 16, 2018  
Source Location: 3100 Stevenson Drive, Springfield (Sangamon County)  
Responsible Official: P. J. Becker/Environmental Health & Safety Manager

Permit Authorization

This revised CAAPP permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Revision: Significant Modification  
Date Revised Permit Issued: TBD

This permit authorization has been provided for the revisions to the CAAPP permit, as further described in the statement of basis that accompanied the draft of this revised permit, that have been made by the procedures for significant modifications to CAAPP permits at Section 39.5(14)(c) of the Illinois Environmental Protection Act. These revisions include changes to this permit to address new Dallman Boiler 4 and associated equipment, which were constructed pursuant to Construction Permit/PSD Approval 04000050 and addressed by an application for a significant modification of the CAAPP permit submitted on March 10, 2010. These revisions also include other changes to this CAAPP permit that would not have been proper to address in the reopening and that do not meet the criteria in the Act for minor modifications and administrative amendments of CAAPP permits.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil  
Acting Manager, Permit Section  
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<sup>2</sup> This CAAPP permit expires on May 16, 2018 except as addressed in Condition 8.7 of this permit.

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CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

City of Springfield  
Attn: P. J. Becker, Environmental Health and Safety Manager  
Seventh and Monroe  
Springfield, Illinois 62757

Application No.: 95090091 I.D. No.: 167120AAO  
Operation of: City, Water, Light and Power (CWLP) - Dallman Station  
Date Issued: September 29, 2005 Initially Effective: May 16, 2013  
Expiration Date:<sup>3</sup> May 16, 2018  
Source Location: 3100 Stevenson Drive, Springfield (Sangamon County)  
Responsible Official: P.J. Becker/Environmental Health & Safety Manager

Permit Authorization

This revised CAAPP permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Revision: Minor Modification  
Date Issued: TBD

This permit authorization has been provided for these revisions of the CAAPP permit that have been made by the procedures for minor modifications of CAAPP permits at Section 39.5(14)(a)(i) of the Illinois Environmental Protection Act. These revisions involve changes to the existing requirements of this CAAPP permit that were not significant but were not appropriate to be addressed as part of the reopening of this permit or as administrative amendments of this permit.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil  
Acting Manager, Permit Section  
Division of Air Pollution Control

REP:MTR:DR:psj

cc: USEPA

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<sup>3</sup> This CAAPP permit will expire on May 16, 2018 except as addressed in Condition 8.7 of this permit.

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CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

City of Springfield  
Attn: P. J. Becker, Environmental Health and Safety Manager  
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Springfield, Illinois 62757

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Operation of: City, Water, Light and Power (CWLP) - Dallman Station  
Date Issued: September 29, 2005 Initially Effective: May 16, 2013  
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Source Location: 3100 Stevenson Drive, Springfield (Sangamon County)  
Responsible Official: P. J. Becker/Environmental Health & Safety Manager

Permit Authorization

This revised CAAPP permit is hereby granted to the above-designated Permittee for operation of the above-referenced source. This permit is subject to the terms and conditions contained herein.

Type of Permit Revision: Administrative Amendment  
Date Issued: TBD

This permit authorization has been provided for the revisions of the CAAPP permit that have been made by the procedures for administrative amendments of CAAPP permits at Section 39.5(13) of the Illinois Environmental Protection Act. These changes involve typographical corrections and minor administrative changes. The renewed federal Acid Rain Program Permit, which was issued by the Illinois EPA for this source in another permit action, has also been included in this revised CAAPP permit as Attachment 3.

Please note that this CAAPP permit has been revised by multiple processes under the CAAPP, each with different legal authority, procedures and standards for issuance. Because of the interplay of the various revisions, a single revised permit has been prepared. Separate permit authorizations are provided for other revisions to this permit, which were made by other processes under the CAAPP.

If you have any questions concerning this permit, please contact the CAAPP Unit at 217/785-1705 (217/782-9143 TDD).

Raymond E. Pilapil  
Acting Manager, Permit Section  
Division of Air Pollution Control

REP:MTR:DR:psj

cc: USEPA

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<sup>4</sup> This CAAPP permit expires on May 16, 2018 except as addressed in Condition 8.7 of this permit.

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## 1.0 INTRODUCTION

### 1.1 Source Identification

City Water, Light & Power, City of Springfield  
3100 Stevenson Drive  
Springfield, Illinois 62707  
217/757-8610

I.D. No.: 167120AAO  
Acid Rain Permit ORIS Code No.: 963/964

Standard Industrial Classification: 4911, Electrical Services

### 1.2 Owner/Parent Company

City of Springfield  
800 East Monroe  
Springfield, Illinois 62757

### 1.3 Operator

City of Springfield  
800 East Monroe  
Springfield, Illinois 62757

P.J. Becker/Schy Willmore-Environmental Contacts  
217/757-8610

### 1.4 General Source Description

The Permittee, City Water, Light & Power operates four coal-fired boilers to produce electricity.

### 1.5 Title I Conditions

This CAAPP permit contains certain conditions for units at this source that address the applicability or substantive requirements of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder, including 40 CFR 52.21, Prevention of Significant Deterioration (PSD), which are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of Illinois' Environmental Protection Act (Act). These "Title I conditions" within this permit are specifically designated as "T1", if they reflect requirements established in construction permits issued for this source, "T1R" if they revise requirements established in such construction permits, or "T1N" if they are newly established in this CAAPP permit. These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, and regulations promulgated thereunder, as well as Titles II and X of the Act. (See also Condition 8.7.)

In addition, as this CAAPP permit contains certain T1 conditions for units at this source that reflect the substantive requirements of PSD for Best Available Control Technology (BACT), as established in Construction Permit/PSD Approval 04110050, those conditions are further designated as "BACT". As with other T1 conditions, these BACT conditions continue in

effect notwithstanding the expiration date specified on the first page of this permit. 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.

2.0 LIST OF ABBREVIATIONS AND ACRONYMS USED IN THIS PERMIT

acfm	Actual Cubic Feet Per Minute
ACI	Activated Carbon Injection
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
BACT	Identifies a Title 1 (T1) Condition in the permit that carries over a requirement for Best Available Control Technology (BACT) established in Construction Permit/PSD Approval 04110050
BART	Identifies a Title 1 (T1) Condition in the permit that carries over a requirement for Best Available Retrofit Technology (BART) established in Construction Permit 09090046
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAIR	Clean Air Interstate Rule
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CSAPR	Cross-State Air Pollution Rule
DSI	Dry Sorbent Injection
EGU	Electrical Generating Unit(s)
ESP	Electrostatic Precipitator
°F	degrees Fahrenheit
FGD	Flue Gas Desulfurization (DSI or WS)
Gal	gallon
GWh	Gigawatt hour (1,000 MWh)
HAP	Hazardous Air Pollutant
Hg	Mercury
HP	horsepower
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
IPCB	Illinois Pollution Control Board
°K	degrees Kelvin
kg	kilogram
kW	Kilowatts
LAER	Lowest Achievable Emission Rate
LEE	Low Emitting EGU
lb	pound
MACT	Maximum Achievable Control Technology
MATS	Mercury and Air Toxics Standard
mmBtu	million British thermal units
MW	Megawatts
MWh	Megawatt hour
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
NSSA	New Source Set-aside

ORIS	Office of Regulatory Information System
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM <sub>2.5</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration (40 CFR 52.21)
psia	pounds per square inch absolute
RMP	Risk Management Plan
SO <sub>2</sub>	Sulfur Dioxide
SCR	Selective Catalytic Reduction
STMS	Sorbent Trap Monitoring System(s)
T	ton (2000 pounds)
TBtu	trillion British thermal units (1,000,000,000,000 Btu)
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material
WS	Wet Scrubber
yr	year

### 3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

None

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

Portable Heaters

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].

Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials,

provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

Note: The heating of a coal-fired boiler with auxiliary fuel during maintenance and repair of the boiler is considered an insignificant activity under 35 IAC 201.210(b)(29) and is generally not addressed by the unit-specific conditions of this permit for coal fired boilers. Notwithstanding such status as an insignificant activity, the opacity of the exhaust from each coal fired boiler is at all times subject to applicable opacity standards and the unit-specific conditions of this permit for boilers that relate to opacity are applicable during maintenance and repair of a boiler.

### 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301(Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182.
- 3.2.2 For each particulate matter process emission unit, other than units excluded by 35 IAC 212.323 or 212.681, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.4 For each particulate matter emission unit, pursuant to 35 IAC 212.123(a), the emission of smoke or other particulate matter, shall not exhibit an opacity greater than 30 percent, into the atmosphere, other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

### 3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a

type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Emission Control/Measurement Equipment	Ref*
Insignificant Activities (activities address in Section 3 of the permit)			
Coal Fired Boilers	Dallman Boilers 31 and 32	Individual ESPs and SCRs, with shared FGD	7.1
	Dallman Boiler 33	SCR, ESP and FGD	7.2
	Dallman Boiler 4	Low-NO <sub>x</sub> Combustion Technology, SCR, Baghouse, Wet FGD and Wet ESP	7.3
Existing Coal Handling Equipment	Coal Receiving, Transfer and Storage Operations	Enclosure, Covers, and Dust Suppressant Application System	7.4
Existing Coal Processing Equipment	Coal Crushing Operation	Enclosures and Covers, Dust Suppressant Application and Dust Collection Devices	7.5
Existing Limestone and Gypsum Handling Equipment	Receiving, Transfer, Storage, and Loadout Operation	Enclosures and Dust Collection Devices	7.6
New & Modified Bulk Material Handling, Processing & Storage Operations	Receiving, Processing, Transfer and Storage Operations for Bulk Material (coal, limestone, flyash, and gypsum) Associated with Boiler 4	Enclosure, Covers, Dust Suppressant Application and Control Devices	7.7
Cooling Tower	Cooling Tower associated with Boiler 4	Drift Eliminator	7.8
Emergency Diesel Engine-Generators	Three Emergency Diesel Engine-Generators	None	7.9
Emergency Fire Pump Engine	Fire Pump Engine	None	7.10
Gasoline Storage Tank	Small Gasoline Storage Tank	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 suppression application, etc.	7.12

\* Reference to the Unit Specific Conditions in Section 7 of this permit.

Note: The descriptions in this table are for informational purposes only and imply no limits or constraints.

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Applicability of Clean Air Act Permit Program (CAAPP)

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of SO<sub>2</sub>, CO, NO<sub>x</sub>, VOM, HAP, and PM emissions.

5.1.2 This permit is issued based on the source requiring a CAAPP permit as an "affected source" for the purposes of Acid Deposition Control, Title IV of the Clean Air Act.

### 5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally towards the zenith (i.e., overhead) at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

#### 5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, including the following:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be appropriately certified by an approved technician certification program pursuant to 40 CFR 82.161.

#### 5.2.4 Risk Management Plan (RMP)

- a. This stationary source, as defined in 40 CFR 68.3, is subject to 40 CFR Part 68, the federal regulations for Chemical Accident Prevention. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(1).
- b. The owner or operator of a stationary source shall revise and update the RMP submitted pursuant to 40 CFR 68.150, as specified in 40 CFR 68.190.

5.2.5 Future Emission Standards

- a. Should this source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B after the date issued of this permit, the Permittee shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance or otherwise demonstrate initial compliance as provided by such regulation. Following the submittal of such a compliance certification or initial compliance demonstration, the Permittee shall address with the applicable requirements of such regulation as part of the annual compliance certification required by Condition 9.8.

Note: This permit may also have to be revised or reopened to address such newly applicable regulations, as provided by Section 39.5(15)(a) of the Act. (See Condition 9.12.2.)

- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

5.2.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, the Permittee shall have on file with the Illinois EPA an Episode Action Plan for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The Episode Action Plan shall contain the information specified in 35 IAC 244.144.
- b. Pursuant to 415 ILCS 5/39.5(7)(a), the Episode Action Plan, as submitted by the Permittee on June 30, 2014, is incorporated herein by reference. Any revision to the plan submitted to Illinois EPA while this permit is in effect is automatically incorporated by reference, provided the revision is not expressly disapproved, in writing, by the Illinois EPA within 30 days of receipt of the revision. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.
- c. The plan incorporated by reference into this permit constitutes the approved Episode Action Plan required by 35 IAC 244.141, addressing the actions that will be implemented to reduce SO<sub>2</sub>, PM<sub>10</sub>, NO<sub>2</sub>, CO and VOM emissions from various emissions units at the source in the event of a yellow alert, red alert or emergency issued under 35 IAC 244.161 through 244.165.
- d. Pursuant to 35 IAC 244.169, or as may otherwise be required under 35 IAC 244, Appendix D, the Permittee shall immediately implement the appropriate steps described in the approved

Episode Action Plan upon receiving notice from the Illinois EPA.

- e. Pursuant to 35 IAC 244.143(d), if an operational change occurs at the source which invalidates the approved Episode Action Plan, a revised Episode Action Plan shall be submitted to the Illinois EPA for review and approval within 30 days of the change.
- f. Pursuant to Section 35 IAC 244.145(b), in the event that the Illinois EPA notifies the Permittee of a deficiency with any Episode Action Plan submitted pursuant to 35 IAC Part 244, the Permittee shall be required to revise and resubmit the Episode Action Plan within 30 days of receipt of notification to address the deficiency.
- g. Pursuant to Section 39.5(7) (b) and (e) of the Act, the Permittee shall keep a copy of the approved Episode Action Plan along with a record of activities completed according to the Episode Action Plan.

#### 5.2.7 Control Measures Record

- a. The Control Measures Record, as submitted by the Permittee on December 12, 2013, is incorporated herein by reference and constitutes the Control Measures Record required by Conditions 7.4.9(b), 7.5.9(b), 7.6.9(b) and 7.7.9(b). Any revised version of the Control Measures Record prepared by the Permittee and submitted to Illinois EPA while this permit term is in effect is automatically incorporated by reference. Upon such automatic incorporation, the revised plan replaces the version of the plan previously incorporated by reference.
- b. Pursuant to Section 39.5(7) (b) of the Act, the Permittee shall keep a copy of the Control Measures Record and any amendments or revisions to the Control Measures Record (as required by Conditions 7.4.9, 7.5.9, 7.6.9 and 7.7.10).

### 5.3 Source-Wide Emission Limitations

#### 5.3.1 Permitted Emissions for Fees (State Requirement Only)

Emission limitations are not set for this source for the purpose of permit fees. Rather, the Permittee shall pay the maximum fee required pursuant to Section 39.5(18) (a) (ii) (A) of the Act. (See also Condition 9.4.)

### 5.4 General Recordkeeping Requirements

#### 5.4.1 Records for Emissions

The Permittee shall maintain records for the source to prepare its Annual Emission Report pursuant to 35 IAC 254.134.

#### 5.4.2 Retention and Availability of Records

The Permittee shall comply with the following requirements with respect to retention and availability of records pursuant to

Sections 4(b) and 39.5(7) (a), (b), (e) (ii), (o) (v), and p(ii) (A) and (B) of the Act.

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for specific records during the course of a source inspection.
- c. Upon written request by the Illinois EPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the Illinois EPA. For this purpose, material shall be submitted to the Illinois EPA within 30 days unless additional time is provided by the Illinois EPA or the Permittee believes that the volume and nature of requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 9.12.4.)

## 5.5 General Reporting Requirements

### 5.5.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7) (f) (ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

- a. For emissions units that are addressed by the unit-specific conditions of this permit, the timing for reporting of deviations shall be in accordance with such conditions.
- b.
  - i. For other emissions units and activities at the source, the timing for reporting of deviations shall be in accordance with the provisions of relevant regulations if such provisions address timing of deviation reports.
  - ii. Otherwise, if the relevant regulations do not address timing of deviation reports, deviation reports shall be submitted within 30 days.

### 5.5.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year, as specified by 35 IAC Part 254 [Section 39.5(7) (a), (b) and (f) of the Act].

## 6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

### 6.1 Acid Rain Program

#### 6.1.1 Applicability

Under Title IV of the CAA, Acid Deposition Control, this source is an affected source and the following emission units at the source are affected units for acid deposition:

Dallman Boilers 31, 32, 33 and 4

Note: Title IV of the CAA, and other laws and regulations promulgated thereunder, establish requirements for affected sources related to control of emissions of pollutants that contribute to acid rain. For purposes of this permit, these requirements are referred to as Title IV provisions.

#### 6.1.2 Applicable Emission Requirements

The owners and operators of the source shall not violate applicable Title IV provisions. In particular, NO<sub>x</sub> emissions of affected units shall not exceed the limit set by 40 CFR Part 76 with the ability for averaging among units as allowed by an Acid Rain Permit. SO<sub>2</sub> emissions of the affected units shall not exceed any allowances that the source lawfully holds under Title IV provisions [Section 39.5(7)(g) and (17)(1) of the Act].

Note: Affected sources must hold SO<sub>2</sub> allowances to account for the SO<sub>2</sub> emissions from affected units at the source that are subject to Title IV provisions. Each allowance is a limited authorization to emit up to one ton of SO<sub>2</sub> emissions during or after a specified calendar year. The possession of allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

#### 6.1.3 Monitoring, Recordkeeping and Reporting

The owners and operators of the source and, to the extent applicable, their designated representative, shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by Title IV provisions, including 40 CFR Part 75. If requested by the Illinois EPA, the designated representative of the source must also submit to the Illinois EPA in the same electronic format specified by the USEPA, the quarterly data and information submitted to USEPA, as provided for by 40 CFR 75.64 [Section 39.5(7)(b) and 17(m) of the Act].

Note: As further addressed by Section 7 of this permit, the following emission determination methods are currently being used for the affected units at this source.

NO <sub>x</sub> :	Continuous Emissions Monitoring (40 CFR 75.12)
SO <sub>2</sub> :	Continuous Emissions Monitoring (40 CFR 75.11)
Opacity:	Continuous Emission Monitoring (40 CFR 75.14)

6.1.4 Acid Rain Permit

The owners and operators of the source shall comply with the terms and conditions of the source's Acid Rain permit [Section 39.5(17) (1) of the Act].

Note: The source is subject to an Acid Rain permit, which was issued pursuant to Title IV provisions, including Section 39.5(17) of the Act. Affected sources must be operated in compliance with their Acid Rain permits. This source's Acid Rain permit is incorporated by reference into this permit and a copy of the current Acid Rain permit is included as Attachment 3 of this permit. Revisions and modifications of this Acid Rain permit, including administrative amendments and automatic amendments (pursuant to Sections 408(b) and 403(d) of the CAA or regulations thereunder) are governed by Title IV provisions, as provided by Section 39.5(13) (e) of the Act. Accordingly, revisions or renewal of the Acid Rain permit may be handled separately from this CAAPP permit and a copy of the new Acid Rain permit may be included in this permit by administrative amendment.

6.1.5 Coordination with Other Requirements

- a. This permit does not contain any conditions that are intended to interfere with or modify the requirements of Title IV provisions. In particular, this permit does not restrict the flexibility under Title IV provisions of the owners and operators of this source to amend their Acid Rain compliance plan [Section 39.5(17) (h) of the Act].
- b. Where another applicable requirement of the CAA is more stringent than an applicable requirement of Title IV provisions, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements [Section 39.5(7) (h) of the Act].

## 6.2 Cross State Air Pollution Rule (CSAPR)

### 6.2.1 Applicability

The USEPA issued the Cross-State Air Pollution Rule (CSAPR),\* also known as the Transport Rule (TR), in July 2011 to address CAA requirements concerning interstate transport of air pollution and to replace the previous Clean Air Interstate Rule (CAIR). This source is an affected source, and the following emission units at the source are affected units for the TR NO<sub>x</sub> Annual Trading Program, the TR NO<sub>x</sub> Ozone Season Trading Program, and the TR SO<sub>2</sub> Group 1 Trading Program:

Dallman Boilers 31, 32, 33, and 4.

\* Federal Implementation Plans; Interstate Transport of Fine Particulate Matter and Ozone and Correction of SIP Approvals, 76 FR 48208 (August 8, 2011); Federal Implementation Plans for Iowa, Michigan, Missouri, Oklahoma, and Wisconsin and Determination for Kansas Regarding Interstate Transport of Ozone, 76 FR 80760 (December 27, 2011); Revisions to Federal Implementation Plans To Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 10324 (February 21, 2012); Revisions to Federal Implementation Plans To Reduce Interstate Transport of Fine Particulate Matter and Ozone, 77 FR 34830 (June 12, 2012).

### 6.2.2 Applicable Emission Requirements

#### a. TR NO<sub>x</sub> Annual Emissions Requirements

i. Pursuant to 40 CFR 97.406(c)(1)(i), beginning January 1, 2015;

- A. As of the allowance transfer deadline for a control period in a given year, the Permittee shall hold, in the source's compliance account, TR NO<sub>x</sub> Annual allowances available for deduction for such control period under 40 CFR 97.424(a) and 97.406(c)(3) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from the affected units.
- B. If total NO<sub>x</sub> emissions during a control period in a given year from the TR NO<sub>x</sub> Annual units at a TR NO<sub>x</sub> Annual source are in excess of the TR NO<sub>x</sub> Annual emissions limitation set forth in Condition 6.2.2(a)(i)(A), then:
  - I. The Permittee and each TR NO<sub>x</sub> Annual unit at the source shall hold the TR NO<sub>x</sub> Annual allowances required for deduction under 40 CFR 97.424(d); and
  - II. The Permittee and each TR NO<sub>x</sub> Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess

emissions and each day of such control period shall constitute a separate violation of 40 CFR 97 Subpart AAAAA and the Clean Air Act.

- ii. Beginning January 1, 2017, if total NO<sub>x</sub> emissions during a control period in a given year from all TR NO<sub>x</sub> Annual units at TR NO<sub>x</sub> Annual sources in Illinois exceed the Illinois assurance level, the Permittee shall comply with the provisions of 40 CFR 97.406(c)(2).
- iii. Compliance periods.
  - A. A TR NO<sub>x</sub> Annual unit shall be subject to the requirements under Condition 6.2.2(a)(i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.406(c)(3)(i)].
  - B. A TR NO<sub>x</sub> Annual unit shall be subject to the requirements under Condition 6.2.2(a)(ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.406(c)(3)(ii)].
- iv. Vintage of allowances held for compliance.
  - A. A TR NO<sub>x</sub> Annual allowance held for compliance with the requirements under Condition 6.2.2(a)(i)(A) for a control period in a given year must be a TR NO<sub>x</sub> Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.406(c)(4)(i)].
  - B. A TR NO<sub>x</sub> Annual allowance held for compliance with the requirements under Conditions 6.2.2(a)(i)(B) or 6.2.2(a)(ii) for a control period in a given year must be a TR NO<sub>x</sub> Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.406(c)(4)(ii)].
- v. Allowance Management System requirements. Each TR NO<sub>x</sub> Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, subpart AAAAA [40 CFR 97.406(c)(5)].
- vi. Limited authorization. A TR NO<sub>x</sub> Annual allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
  - A. Such authorization shall only be used in accordance with the TR NO<sub>x</sub> Annual Trading Program [40 CFR 97.406(c)(6)].

b. TR NO<sub>x</sub> Ozone Season Emissions Requirements

- i. Pursuant to 40 CFR 97.506(c)(1)(i), beginning May 1, 2015;
  - A. As of the allowance transfer deadline for a control period in a given year, the Permittee shall hold, in the source's compliance account, TR NO<sub>x</sub> Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) and 97.506(c)(3) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from the affected units.
  - B. If total NO<sub>x</sub> emissions during a control period in a given year from the TR NO<sub>x</sub> Ozone Season units at a TR NO<sub>x</sub> Ozone Season source are in excess of the TR NO<sub>x</sub> Ozone Season emissions limitation set forth in Condition 6.2.2(b)(i)(A) above, then:
    - I. The Permittee and each TR NO<sub>x</sub> Ozone Season unit at the source shall hold the TR NO<sub>x</sub> Annual allowances required for deduction under 40 CFR 97.524(d); and
    - II. The Permittee and each TR NO<sub>x</sub> Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart BBBBB and the Clean Air Act.
- ii. Beginning May 1, 2017, if total NO<sub>x</sub> emissions during a control period in a given year from all TR NO<sub>x</sub> Ozone Season units at TR NO<sub>x</sub> Ozone Season sources in Illinois exceed the Illinois assurance level, the Permittee shall comply with the provisions of 40 CFR 97.506(c)(2).
- iii. Compliance periods.
  - A. A TR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under Condition 6.2.2(b)(i) for the control period starting on May 1, 2015, and for each control period thereafter [40 CFR 97.506(c)(3)(i)].
  - B. A TR NO<sub>x</sub> Ozone Season unit shall be subject to the requirements under Condition 6.2.2(b)(ii) above for the control period starting on May 1, 2017, and for each control period thereafter [40 CFR 97.506(c)(3)(ii)].
- iv. Vintage of allowances held for compliance.

- A. A TR NO<sub>x</sub> Ozone Season allowance held for compliance with the requirements under Condition 6.2.2(b) (i) (A) for a control period in a given year must be a TR NO<sub>x</sub> Annual allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.506(c) (4) (i)].
  - B. A TR NO<sub>x</sub> Ozone Season allowance held for compliance with the requirements under Conditions 6.2.2(b) (i) (B) or 6.2.2(b) (ii) for a control period in a given year must be a TR NO<sub>x</sub> Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.506(c) (4) (ii)].
- v. Allowance Management System requirements. Each TR NO<sub>x</sub> Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart BBBBB [40 CFR 97.506(c) (5)].
- vi. Limited authorization. A TR NO<sub>x</sub> Ozone Season allowance is a limited authorization to emit one ton of NO<sub>x</sub> during the control period in one year. Such authorization is limited in its use and duration as follows:
- A. Such authorization shall only be used in accordance with the TR NO<sub>x</sub> Ozone Season Trading Program [40 CFR 97.506(c) (6)].
- c. TR SO<sub>2</sub> Emissions Requirements
- i. Pursuant to 40 CFR 97.606(c) (1) (i), beginning January 1, 2015;
    - A. As of the allowance transfer deadline for a control period in a given year, the Permittee shall hold, in the source's compliance account, TR SO<sub>2</sub> Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) and 97.606(c) (3) in an amount not less than the tons of total SO<sub>2</sub> emissions for such control period from the affected units.
    - B. If total SO<sub>2</sub> emissions during a control period in a given year from the TR SO<sub>2</sub> Group 1 units at a TR SO<sub>2</sub> Group 1 source are in excess of the TR SO<sub>2</sub> Group 1 emissions limitation set forth in Condition (c) (i) (A) above, then:
      - I. The Permittee and each TR SO<sub>2</sub> Group 1 unit at the source shall hold the TR SO<sub>2</sub> Group 1 allowances required for deduction under 40 CFR 97.624(d); and

- II. The Permittee and each TR SO<sub>2</sub> Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR 97 Subpart CCCCC and the Clean Air Act.
- ii. Beginning January 1, 2017, if total SO<sub>2</sub> emissions during a control period in a given year from all TR SO<sub>2</sub> Group 1 units at TR SO<sub>2</sub> Group 1 sources in Illinois exceed the Illinois assurance level, the Permittee shall comply with the provisions of 40 CFR 97.606(c) (2).
- iii. Compliance periods.
  - A. A TR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under Condition 6.2.2(c) (i) for the control period starting on January 1, 2015, and for each control period thereafter [40 CFR 97.606(c) (3) (i)].
  - B. A TR SO<sub>2</sub> Group 1 unit shall be subject to the requirements under Condition 6.2.2(c) (ii) above for the control period starting on January 1, 2017, and for each control period thereafter [40 CFR 97.606(c) (3) (ii)].
- iv. Vintage of allowances held for compliance.
  - A. A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under Condition 6.2.2(c) (i) (A) for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for such control period or a control period in a prior year [40 CFR 97.606(c) (4) (i)].
  - B. A TR SO<sub>2</sub> Group 1 allowance held for compliance with the requirements under Conditions 6.2.2(c) (i) (B) or 6.2.2(c) (ii) for a control period in a given year must be a TR SO<sub>2</sub> Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year [40 CFR 97.606(c) (4) (ii)].
- v. Allowance Management System requirements. Each TR SO<sub>2</sub> Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR 97 Subpart CCCCC [40 CFR 97.606(c) (5)]
- vi. Limited authorization. A TR SO<sub>2</sub> Group 1 allowance is a limited authorization to emit one ton of SO<sub>2</sub> during

the control period in one year. Such authorization is limited in its use and duration as follows:

- A. Such authorization shall only be used in accordance with the TR SO<sub>2</sub> Group 1 Trading Program [40 CFR 97.606(c)(6)].

### 6.2.3 Monitoring, Recordkeeping and Reporting

- a. The Permittee must submit to the USEPA Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable [40 CFR 97.434(b), 40 CFR 97.534(b) and 40 CFR 97.634(b)].
- b. For TR NO<sub>x</sub> Annual emissions, the Permittee shall comply with the monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart AAAAA, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.406(b)(2); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.430; the monitoring system certification and recertification requirements specified at 40 CFR 97.431; the monitoring system out-of-control requirements specified at 40 CFR 97.432; the notification requirements specified at 40 CFR 97.433; the recordkeeping and reporting requirements specified at 40 CFR 97.434; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 97.435.
- c. For TR NO<sub>x</sub> Ozone Season emissions, the Permittee shall comply with the monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart BBBBB, and 40 CFR Part 75 Subpart H. These provisions include the calculation requirements specified at 40 CFR 97.506(b)(2); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.530; the monitoring system certification and recertification requirements specified at 40 CFR 97.531; the monitoring system out-of-control requirements specified at 40 CFR 97.532; the notification requirements specified at 40 CFR 97.533; the recordkeeping and reporting requirements specified at 40 CFR 97.534; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 97.535.
- d. For TR SO<sub>2</sub> Group 1 emissions, the Permittee shall comply with the monitoring, recordkeeping, and reporting provisions specified in 40 CFR Part 97 Subpart CCCCC, and 40 CFR Part 75 Subparts F and G. These provisions include the calculation requirements specified at 40 CFR 97.606(b)(2); the general monitoring, recordkeeping, and reporting requirements specified at 40 CFR 97.630; the monitoring system certification and recertification requirements specified at 40 CFR 97.631; the monitoring system out-of-control requirements specified at 40 CFR 97.632; the notification requirements specified at 40 CFR 97.633; the recordkeeping and reporting requirements specified at 40 CFR 97.634; and the petitions for alternatives to monitoring, recordkeeping, or reporting requirements specified at 40 CFR 97.635.

6.2.4 Designated Representative and Alternate Designated Representative

Pursuant to 40 CFR 97.413, 40 CFR 97.513, and 40 CFR 97.613, the Permittee shall appoint a Designated Representative, and may also appoint an Alternate Designated Representative for the affected units, in order to discharge the applicable responsibilities specified at 40 CFR 97.414-418 for the TR NO<sub>x</sub> Annual Trading Program; 40 CFR 97.514-518 for the TR NO<sub>x</sub> Ozone Season Trading Program; and 40 CFR 97.614-618 for the TR SO<sub>2</sub> Group 1 Trading Program.

6.2.5 Coordination with Other Requirements

- a. Any provisions of the TR NO<sub>x</sub> Annual or Ozone Season or TR SO<sub>2</sub> Group 1 Trading Program that applies to a source or the designated representative shall also apply to the owners and operators of such source and the affected units at the source [40 CFR 97.406(f) (1), 40 CFR 97.506(f) (1) and 40 CFR 97.606(f) (1)].
- b. Any provisions of the TR NO<sub>x</sub> Annual or Ozone Season or TR SO<sub>2</sub> Group 1 Trading Program that applies to an affected unit or the designated representative shall also apply to the owners and operators of such unit [40 CFR 97.406(f) (2), 40 CFR 97.506(f) (2) and 40 CFR 97.606(f) (2)].
- c. This permit does not contain any conditions that are intended to interfere with or modify the requirements of the Transport Rule, 40 CFR Part 97 Subparts AAAAA, BBBBB or CCCCC.
- d. Where another applicable requirement of the CAA is more stringent than an applicable requirement of 40 CFR Part 97, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements [Section 39.5(7) (h) of the Act].

### 6.3 Best Available Retrofit Technology (BART)

#### 6.3.1 Description

Certain units at the source (i.e., Dallman Boilers 31 and 32) are subject to requirements for Best Available Retrofit Technology (BART). The requirements are set forth in the emission control program (Program) for these units established by Construction Permit 09090046 issued June 23, 2011. The Program addresses the role of the emissions from these units in visibility impairment and regional haze, as is required for these units by Section 169A of the federal Clean Air Act, Visibility Protection for Federal Class I Areas. Under the Program, the Permittee reduced emissions of NO<sub>x</sub> and SO<sub>2</sub> from these BART subject units by enhancing the operation of the existing SCR system and flue gas desulfurization equipment on the units. These BART subject units are subject to annual limits for the NO<sub>x</sub> and SO<sub>2</sub> emission rates of the units.

Nothing in the Program prohibits or restricts the ability of the City of Springfield to sell, trade SO<sub>2</sub> or NO<sub>x</sub> emissions allowances of any vintage owned or transferred, allocated to or earned by the BART affected units. It is prohibited from claiming compliance with the emission rate requirements through any trading or offset program that may otherwise be applicable to the BART affected units.

Note: The description in Condition 6.3.1 is for informational purposes only.

#### 6.3.2 Applicability

The following emission units at this source are affected units for BART. For this purpose in this permit, these units are referred to as "BART affected units".

Dallman Boilers 31 and 32.

#### 6.3.3 Emission Reduction Requirements for the BART Affected Units

As provided by Construction Permit #09090046, the Permittee shall comply with the following: [T1] [BART]

##### 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 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 units, combined, on a calendar year basis, shall not exceed 0.11 pounds per mmBtu.

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 BART affected 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 BART affected units, combined, on a calendar year basis, shall not exceed 0.23 pounds per mmBtu.

c. Compliance Methodology

Compliance with the limits in Conditions 6.3.3(a) and (b) shall be determined by dividing the total amount of NO<sub>x</sub> or SO<sub>2</sub> emitted by the BART affected Dallman units during the particular compliance period, in pounds, by the fuel heat input into the units during the period, in mmBtu, using data for the emissions and heat input collected under the federal Cross-State Air Pollution Rule (CSAPR). NO<sub>x</sub> and SO<sub>2</sub> allowances under CSAPR shall not be considered in determining compliance with these limits, provided however that the transfer of such allowances associated with the BART affected Dallman units is not restricted by the Program and nothing in the Program shall be considered to prohibit or restrict the ability of the Permittee or the City of Springfield to sell, trade or transfer SO<sub>2</sub> or NO<sub>x</sub> allowances of any vintage owned, allocated to or earned by the BART affected Dallman units.

6.3.4 Reporting Requirements under the Program

As provided by Construction Permit #09090046, the Permittee shall submit annual compliance reports to the Illinois EPA that provide the annual NO<sub>x</sub> and SO<sub>2</sub> emission rates of the BART affected units, with supporting documentation, and address compliance with the emission limits in Conditions 6.3.3(a) and (b), as applicable. These reports shall be submitted by March 1 of the year following the calendar year addressed by the report. [T1] [BART]

#### 6.4 Control of Mercury Emissions from Coal-fired Electric Generating Units (State-Only Requirements)

##### 6.4.1 Description

The purpose of 35 IAC Part 225 Subpart B is to control emissions of mercury from coal-fired EGUs operating in Illinois. Compliance with mercury emission standards in 35 IAC 225 Subpart B is demonstrated through continuous emission monitoring with either mercury CEMS units or Sorbent Trap Monitoring Systems (i.e., an excepted monitoring system).

Only 35 IAC 225.233(a), (b), (e) and (g), 225.291, 225.292, 225.293, 225.295 and 225.296 have been approved by USEPA as part of Illinois' State Implementation Plan (SIP), which include the provisions of the Illinois Mercury Rule that relate to SO<sub>2</sub> and NO<sub>x</sub> emissions. Portions of the Illinois Mercury Rule relating to mercury emissions have not been approved in the SIP and therefore this section of the permit is designated as "State-Only Requirements".

Note: The description in Condition 6.4.1 is for informational purposes only and implies no limits or constraints.

##### 6.4.2 List of Emission Units

The EGUs associated with the following emission units at the source are affected EGUs for the purpose of 35 IAC Part 225 Subpart B:

Dallman Boilers 31, 32, 33 and 4.

##### 6.4.3 Applicability

- a. Pursuant to 35 IAC 225.205, the affected EGUs are subject to the applicable requirements in 35 IAC 225 Subpart B, Control of Mercury Emissions from Coal-fired Electric Generating Units and 35 IAC 225 Subpart A, General Provisions.
- b. Pursuant to 35 IAC 225.240 for the affected EGUs, the Permittee must comply with the monitoring, recordkeeping, and reporting provisions of 35 IAC 225.240 through 225.290 and Sections 1.14 through 1.18 of Appendix B to 35 IAC 225.
- c. Pursuant to 35 IAC 225.240(d), the Permittee is subject to the following prohibitions:
  - i. An affected EGU may not use any alternative emissions monitoring system, alternative reference method for measuring emissions or other alternative to the emissions monitoring and measurement requirements in 35 IAC 225.240 through 225.290, unless such alternative has been submitted and approved by the Illinois EPA in accordance with 35 IAC 225.240(d)(1).
  - ii. An affected EGU may not be operated as to discharge or allowed to discharge mercury emissions into the atmosphere without accounting for such emissions in

accordance with the applicable provisions of 35 IAC 225.240 through 225.290 and Sections 1.14 through 1.18 of Appendix B to 35 IAC 225.

- iii. The excepted monitoring system for an affected EGU may not be disrupted and thereby avoid monitoring and recording mercury mass emissions discharged into the atmosphere except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of 35 IAC 225.240 through 225.290 and Sections 1.14 through 1.18 of Appendix B to 35 IAC 225.
- iv. The use of the excepted monitoring system for an affected EGU or any component thereof may not be retired or permanently discontinued except as provided under 35 IAC 225.240(d)(4)(A) through (C).

#### 6.4.4 Emission Standards for EGUs

- a. Pursuant to 35 IAC 225.230(a)(1)(A) and (a)(2), the Permittee shall comply with the following emission standard for each EGU on a rolling 12-month basis, based on the monitored emission rate during quality-assured monitor operating (QAMO) hours of the EGU for each 12-month rolling period, calculated in accordance with the equation in 35 IAC 225.230(a)(2):

An emission standard of 0.0080 lb mercury/GWh gross electrical output

- b. Pursuant to 35 IAC 225.230(c) for Boilers 31 and 32 which share a common stack, compliance with the applicable requirements in Condition 6.4.4(a) must be determined as if the EGUs were a single EGU.

#### 6.4.5 Monitoring

- a. The Permittee shall install the monitoring systems required pursuant to 35 IAC 225.240 through 225.290 for monitoring mercury mass emissions (including the systems required to monitor mercury concentration, stack gas moisture content, stack gas flow rate, and CO<sub>2</sub> or O<sub>2</sub> concentration, as applicable, in accordance with Sections 1.14 or 1.18 of 35 IAC 225. Appendix B).
- b. Pursuant to 35 IAC 225,263 for any EGU complying with the emission standard in Condition 6.4.4(a), the Permittee must monitor gross electrical output of the associated generators in MWh on an hourly basis.

#### 6.4.6 Operation Requirements

- a. Pursuant to 35 IAC 225.250 and Section 1.3 of Appendix B to 35 IAC 225, the Permittee must comply with the initial certification and recertification procedures for a new CEMS or replacement/modified excepted monitoring system as

required by 35 IAC 225.240(a)(1) in accordance with the provisions of 35 IAC 250(a) through (d).

- b. Pursuant to 35 IAC 225.260(a), the Permittee must determine "out of control" periods for the excepted monitoring system in accordance with the provisions in Section 1.7 of Appendix B to 35 IAC 225.
- c. Pursuant to 35 IAC 225.260(b), the Permittee must ensure monitor data availability for all EGUs using the excepted monitoring system is greater than 75 percent in accordance with the provisions of 35 IAC 225.260(b).
- d. Pursuant to 35 IAC 225.260(c) if a notice of disapproval for a previously certified excepted monitoring system is received from the Illinois EPA, the Permittee shall follow the applicable initial certification or recertification procedures in 35 IAC 225.250.

#### 6.4.7 Recordkeeping

- a. Pursuant to 35 IAC 225.210(d), the Permittee shall keep on site the following records the following documents for a period of 5-years from the date the document was created:
  - i. All emissions monitoring information gathered in accordance with 35 IAC 225.240 through 225.290.
  - ii. Copies of all reports, compliance certifications, and other submissions and all records made or required or documents necessary to demonstrate compliance with the requirements of 35 IAC 225 Subpart B.
  - iii. Copies of all documents used to complete a permit application and any other submission under 35 IAC 225 Subpart B
- b. Pursuant to 35 IAC 225.290(a)(1), the Permittee must comply with all applicable recordkeeping and reporting requirements of 35 IAC 290 and Section 1.18 to Appendix B to 35 IAC 225.290.
- c. Pursuant to 35 IAC 225.290(a)(2)(B), the Permittee must maintain records of the daily and monthly gross electrical output (GWh).
- d. Pursuant to 35 IAC 225.290(a)(3), the Permittee must maintain records of the monthly emissions of mercury from each ERG.
- e. Pursuant to 35 IAC 225.290(a)(5), the Permittee must maintain the following records related to quality assurance activities conducted for emissions monitoring systems:
  - i. The results of quarterly assessments conducted pursuant to Section 2.2 of Exhibit B to Appendix B to 35 IAC 225; and

- ii. Daily/weekly system integrity checks pursuant to Section 2.6 of Exhibit B to Appendix B to 35 IAC 225.
- f. Pursuant to 35 IAC 225.290(a)(6), the Permittee must retain all records required by 35 IAC 290 at the source for a period of five years from the date the document is created unless otherwise provided in this CAAPP permit and must make a copy of any record available to the Agency upon request. This period may be extended in writing by the Illinois EPA, for cause, at any time prior to the end of five years.

#### 6.4.8 Reporting

- a. Pursuant to 35 IAC 225.290(b), the Permittee must submit quarterly reports to the Illinois EPA within 60 days following the end of the quarter as follows:
  - i. Source information such as source name, source ID number, and the period covered by the report;
  - ii. A list of all EGUs at the source that identifies the applicable monitoring and reporting requirements from 35 IAC 225 with which each EGU is complying for the reported quarter.
  - iii. The following information for EGUs using an excepted monitoring system at any time during the calendar quarter:
    - A. An indication of whether the EGUs were in compliance with all applicable monitoring, recordkeeping and reporting requirements in 35 IAC 225 Subpart B for the entire month.
    - B. The total quarterly operating hours of each EGU.
    - C. The excepted monitoring system QAMO hours on a quarterly basis and percentage data availability on a quarterly or rolling 12-month basis (for each concluding 12-month period in that quarter), as appropriate according to the schedule provided in 35 IAC 225.260(b). The data availability shall be determined in accordance with Section 1.9 (excepted monitoring system) of Appendix B of 35 IAC 225.
    - D. The quarterly mercury mass emissions (in ounces), determined from the QAMO hours in accordance with Section 4.2 of Exhibit C to Appendix B to 35 IAC 225.
    - E. The average monthly and quarterly mercury emission rate (in lbs/GWh) for each EGU, determined in accordance with 35 IAC 225.230(a)(2).
    - F. If the excepted monitoring system percentage data availability was less than 95.0 percent of the

total operating time for the EGU, the date and time identifying each period during which the CEMS was inoperative, except for routine zero and span checks; the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with Appendix B to 35 IAC 225, i.e., the dates and results of the Linearity Tests and any RATAs during the quarter; a listing of any days when a required daily calibration was not performed; and the date and duration of any periods when the CEMS was unavailable or out-of-control as addressed by 35 IAC 225.260.

- b. Pursuant to 35 IAC 225.290(c), the Permittee must submit to the Illinois EPA a compliance certification in support of each quarterly report based on reasonable inquiry of those persons with primary responsibility for ensuring that all of the EGUs emissions are correctly and fully monitored. This certification must state the information detailed in 35 IAC 225.290(c) (1) and (2).
- c. Pursuant to 35 IAC 225.290(d), the Permittee must submit to the Illinois EPA an Annual Certification of Compliance with 35 IAC 225 Subpart B no later than May 1 of each year and must address compliance for the previous calendar year. Such certification must be submitted to the Agency, Air Compliance Section, and the Air Regional Field Office.
- d. Pursuant to 35 IAC 225.290(d) (2), the Annual Certifications of Compliance must indicate whether compliance existed for each EGU for each month in the year covered by the Certification and it must certify to that effect. In addition the Permittee must provide the following appropriate data:
  - i. Emissions rate during QAMO hours, in lbs/GWh, for each 12-month rolling period ending in the year covered by the Certification;
  - ii. Emissions during QAMO hours, in lbs, and gross electrical output, in GWh, for each 12-month rolling period ending in the year covered by the Certification; and
  - iii. Emissions during QAMO hours, in lbs, and gross electrical output, in GWh, for each month in the year covered by the Certification and in the previous year.
  - iv. Any deviations or exceptions each month and discussion of the reasons for such deviations or exceptions.
- e. Pursuant to 35 IAC 225.290(d) (3), the Annual Certifications of Compliance must include a certification statement by a responsible official as detailed in 35 IAC 225.290(d) (3).

- f. Pursuant to 35 IAC 225.290(e), the Permittee must promptly notify the Illinois EPA of deviations from requirements of 35 IAC 225 Subpart B. At a minimum, these notifications must include a description of such deviations within 30 days after discovery of the deviations, and a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken.
- g. Pursuant to 35 IAC 225.290(f), the Permittee must submit to the Illinois EPA - Compliance and Enforcement Section, the quality assurance RATA report for each EGU or group of EGUs monitored at a common stack and each non-EGU pursuant to Section 1.16(b)(2)(B) of Appendix B to 35 IAC 225, within 45 days after completing a quality assurance RATA.

#### 6.4.9 Compliance Procedures

- a. Compliance with the mercury emission limits of Condition 6.4.4(a) is addressed by continuous emission monitoring in accordance with Condition 6.4.5, the recordkeeping required by Condition 6.4.7 and the reporting required by Condition 6.4.8.

## 6.5 Mercury and Air Toxics Standard (MATS)

### 6.5.1 Description

On December 16, 2011, the USEPA adopted a rule to limit emissions of hazardous air pollutants (HAPs) from coal and oil-fired power plants, 40 CFR 63 Subpart UUUUU. These rules, commonly referred to as the Mercury and Air Toxics Standards (MATS) address emissions of HAPs from both existing and new coal and oil-fired electric utility steam generating units (EGUs).

The rule establishes numeric emission standards for non-mercury HAP metals, mercury and non-organic acid gases. It also establishes surrogate emission standards, including SO<sub>2</sub> (as a surrogate for non-organic acid gases), and filterable PM (as a surrogate for non-mercury HAP metals).

The rule sets work practices for emissions of organic HAPs, including dioxin/furan. The work practice standards require periodic tune-ups for each unit that includes inspection, adjustment, and/or maintenance and repairs to ensure efficient combustion.

Note: The description in Condition 6.5.1 is for informational purposes only and implies no limits or constraints.

### 6.5.2 Applicability Provisions

Certain affected sources at the source, as specified below, are "affected electric utility steam generating units" or "affected EGUs" for the purposes of the National Emission Standards for Hazardous Air Pollutants (NESHAP): Coal- and Oil-Fired Electric Utility Steam Generating Units, pursuant to 40 CFR 63.9981 and 63.9982(a)(1), because they are coal fired EGUs as defined at 40 CFR 63.10042. These affected EGUs are subject to the applicable requirements of 40 CFR Part 63 Subpart UUUUU and related requirements in the General Provisions of the NESHAP, 40 CFR Part 63 Subpart A.

Dallman Boilers 31, 32, 33 and 4.

The affected EGUs are in the subcategory of existing EGUs designed for coal with a heating value greater than or equal to 8300 Btu/lb [40 CFR 63.9990].

### 6.5.3 Applicable Emission Standards

- a. Unless an affected unit complies with the requirements for a Low Emitting EGU (LEE) in Condition 6.5.9(b) or alternative requirements in Conditions 6.5.9(c) or (d), the Permittee shall comply with the following applicable requirements:
  - i. For non-mercury HAP metals,
    - A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGUs shall comply with one of the following limits:

- I. Emissions of filterable particulate matter shall not exceed, as a 30-boiler operating day rolling average:
    - a. 0.030 lb/mmBtu (mass per heat input);  
or
    - b. 0.30 lb/MWh (mass per gross output).
  - II. As an alternative to the standard in Condition 6.5.3(a) (i) (A) (I), the Permittee may elect to comply with the standard for individual or total non-mercury HAP metals as set forth in Condition 6.5.9(c).
- ii. For mercury,
- A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not using emissions averaging, emissions of mercury from the affected EGUs shall not exceed, as a 30-boiler operating day rolling average:
    - I. 1.2 lb/TBtu (mass per heat input); or
    - II. 0.013 lb/GWh (mass per gross output).
  - B. Pursuant to 40 CFR 63.10009(a) (2), if the Permittee is using emissions averaging for mercury, emissions from the affected EGUs shall not exceed, as a 90-group boiler operating day rolling average:
    - I. 1.0 lb/TBtu (mass per heat input); or
    - II. 0.011 lb/GWh (mass per gross output).
- iii. For acid gases,
- A. Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, emissions from the affected EGUs shall comply with one of the following limits:
    - I. Emissions of SO<sub>2</sub> shall not exceed, as a 30-boiler operating day rolling average:
      - a. 0.20 lb/mmBtu (mass per heat input);  
or
      - b. 1.5 lb/MWh (mass per gross output).
    - II. As an alternative to the standard in Condition 6.5.3(a) (iii) (A) (I), the Permittee may elect to comply with the standard for hydrogen chloride as set forth in Condition 6.5.9(d).

- B. Pursuant to 40 CFR 63.9991(c)(2), if the Permittee is complying with the SO<sub>2</sub> limit in Condition 6.5.3(a)(iii)(A)(I), the Permittee must, at all times, operate the wet or dry flue gas desulfurization technology and the SO<sub>2</sub> CEMS installed on the affected units consistent with 40 CFR 63.10000(b):
- b. The Permittee may use the emissions averaging provisions of 40 CFR 63.10009 and 40 CFR 63.10022 to demonstrate compliance with the emission standards specified in Conditions 6.5.3(a)(i), (ii)(B), and (iii).
  - c. If the Permittee elects to switch from heat input based limits to gross output based limits (or vice-versa) in Condition 6.5.3(a) or to an alternate emission standard or provision in Conditions 6.5.9(c) through (e), the Permittee shall comply with the Notification of Compliance Status requirements in Condition 6.5.9(a).
  - d. Pursuant to 40 CFR 63.10000(b), at all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
  - e. Performance Tune-Up Work Practices:  
  
Pursuant to 40 CFR 63.9991(a)(1), and item 1 of Table 3 to Subpart UUUUU of 40 CFR Part 63, the Permittee shall conduct a tune-up of the burners and combustion controls of each affected EGU at least every 36 calendar months, or each 48 months if neural network combustion optimization software is employed, as specified at 40 CFR 63.10021(e).

#### 6.5.4 Applicable Monitoring and Testing Requirements

- a. Unless an affected EGU complies with the LEE requirements in Condition 6.5.9(b) or alternative requirements in Conditions 6.5.9(c) or (d), the Permittee shall comply with the following applicable requirements for the affected EGU:
  - i. For non-mercury HAP metals, pursuant to 40 CFR 63.10000(c)(1)(iv), in order to demonstrate compliance with the filterable particulate matter emission standard specified in Condition 6.5.3(a)(i)(A), the Permittee shall monitor continuous performance through performance testing repeated quarterly.

- ii. For mercury, the Permittee shall monitor emissions of mercury from affected EGUs using a sorbent trap monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR Part 63 Subpart UUUUU.
- iii. For Acid Gases, to demonstrate compliance with the SO<sub>2</sub> emission limit specified in Condition 6.5.3(b)(i), the Permittee shall operate and maintain an SO<sub>2</sub> CEMS in accordance with the requirements specified at 40 CFR 63.10010(f) and 40 CFR 63.10020(a) through (d).
- iv. For Continuous Monitoring Systems,
  - A. The Permittee shall comply with the provisions of 40 CFR 63.10010(b), (c) and (d), and 40 CFR 63.10020(a) through (d) regarding CO<sub>2</sub> CEMS, stack gas flow rate monitoring, and stack gas moisture content.
  - B. Pursuant to 40 CFR 63.10007(f), since the Permittee uses a continuous monitoring system to monitor emissions of mercury and SO<sub>2</sub>, the Permittee may use the diluent cap and default gross output values as specified at 40 CFR 63.10007(f)(1) and (2) in emission rate calculations during startup and shutdown periods.

#### 6.5.5 General Testing Requirements

- a. Pursuant to 63.10021(a), the Permittee shall conduct all performance testing in accordance with the requirements of 40 CFR 63.10007 and item 1 in Table 2, Table 5, and item 4 in Table 7 to Subpart UUUUU of 40 CFR Part 63.

#### 6.5.6 General Recordkeeping Requirements

- a. The Permittee shall keep copies of any information and reports submitted to comply with the requirements of 40 CFR 63 Subpart UUUUU, and copies of any performance stack tests, CMS performance evaluations, and compliance demonstrations as specified at 40 CFR 63.10032(a).
- b. The Permittee shall keep records for any CMS as specified at 40 CFR 63.10032(b) and 40 CFR 63.10(c).
- c. The Permittee shall keep records of any monitoring data as specified at 40 CFR 63.10032(c) and 63.10(b)(2)(vii) through (ix).
- d. The Permittee shall keep records of any monthly fuel use, non-hazardous secondary materials combusted, and information for affected EGUs qualifying as LEE units as specified at 40 CFR 63.10032(d).
- e. The Permittee shall keep records for any emissions averaging as specified at 40 CFR 63.10032(e).

- f. The Permittee shall keep records regarding any startup or shutdown periods as specified at 40 CFR 63.10032(f) and (i).
- g. The Permittee shall keep records regarding any equipment malfunctions as specified at 40 CFR 63.10032(g) and (h).
- h. The Permittee shall keep records of any maintenance performed on air pollution control and monitoring equipment as specified at 40 CFR 63.10(b)(2)(iii).
- i. The Permittee shall keep records of any continuous monitoring system malfunctions and inoperative periods as specified at 40 CFR 63.10(b)(2)(vi).
- j. The Permittee shall keep records of any periods of monitored excess emissions as specified at 40 CFR 63.10(c)(7) and (8).
- k. The Permittee shall keep sorbent trap monitoring systems and other CMS system records as specified in Section 7.1 of Appendix A to 40 CFR Part 63 Subpart UUUUU.
- l. Pursuant to 40 CFR 63.10033 and 40 CFR 63.10(b)(1), the Permittee shall keep any required records on site for at least the first two years, but may be kept off-site after the first two years.

#### 6.5.7 Reporting Requirements

- a. Pursuant to 40 CFR 63.10030(a), the Permittee shall submit the following notifications, as applicable, in accordance with the specified regulatory provision(s):
  - i. Periodic Test Notifications, as specified at 40 CFR 63.7(b), 40 CFR 63.9(e), and 63.10030(d), to be submitted at least 30 days before the test is scheduled to begin.
  - ii. Continuous Monitoring System Performance Evaluation Notices, as specified at 40 CFR 63.8(e).
  - iii. Alternative Monitoring Requests, as specified at 40 CFR 63.8(f)(4).
  - iv. Alternative RATA Requests, as specified at 40 CFR 63.8(f)(6).
  - v. Special Compliance Requirements Notices, as specified at 40 CFR 63.9(d).
  - vi. Additional CMS Notifications, as specified at 40 CFR 63.9(g).
  - vii. Notifications of Compliance Status, as specified at 40 CFR 63.9(h), 40 CFR 63.10030(e) and Condition 6.5.9(a)(i).
- b. Pursuant to 40 CFR 63.10031(b), the Permittee shall submit a Semiannual Compliance Report no later than January 31 and

July 31 of each year. Each Semiannual Compliance Report shall contain the information specified at 40 CFR 63.10031(c) through (d) and (g).

- i. Pursuant to 40 CFR 63.10031(e), the Permittee shall report deviations from the applicable requirements of 40 CFR 63 Subpart UUUUU (as defined at 40 CFR 63.10042) in the Semiannual Compliance Report.
- c. Pursuant to 40 CFR 63.10031(f) and 40 CFR 63.10(d) (1) and (2), the Permittee shall submit reports of performance tests and CEMS performance evaluations required by 40 CFR 63 Subpart UUUUU no later than 60 days after completion.
- d. The Permittee shall comply with the reporting requirements for mercury CEMS and sorbent trap monitoring systems specified at Sections 7.2.1 through 7.2.4 of Appendix A to 40 CFR 63 Subpart UUUUU.
- e. Pursuant to Section 7.2.5 of Appendix A to 40 CFR 63 Subpart UUUUU, the Permittee shall submit mercury CEMS and sorbent trap monitoring system data quarterly within 30 days after the end of each calendar quarter, using the ECMPS Client Tool.
- f. The Permittee shall comply with the reporting requirements for HCl CEMS specified at Sections 11.1 through 11.4 of Appendix B to 40 CFR 63 Subpart UUUUU.
- g. Pursuant to Section 11.5 of Appendix B to 40 CFR 63 Subpart UUUUU, the Permittee shall submit HCl CEMS data quarterly within 30 days after the end of each calendar quarter, using the ECMPS Client Tool.

#### 6.5.8 Startup/Shutdown Provisions

- a. Pursuant to 40 CFR 63.9991(a) (1) and 63.10021(h), the Permittee shall comply with the control device operation, fuel usage, monitoring, recordkeeping, and reporting requirements specified in items 3 and 4 of Table 3 to Subpart UUUUU of 40 CFR Part 63 during startup periods and shutdown periods (as those terms are defined at 40 CFR 63.10042) of the affected EGUs.
  - i. The Permittee has elected to use paragraph (1) of the definition of "startup" in 40 CFR 63.10042, and must therefore operate all CMS during startup and use "clean fuels" as defined at 40 CFR 63.10042 for ignition.
  - ii. Pursuant to 40 CFR 63.10030(e) (8) (iii), the Permittee may switch from paragraph (1) of the definition of "startup" in 40 CFR 63.10042 to paragraph (2) of the definition of "startup" (or vice-versa), provided that the Permittee follows the procedure specified at 40 CFR 63.10030(e) (8) (iii) (A) through (E).

- iii. Pursuant to 40 CFR 63.10030(e)(8)(i), should the Permittee choose to rely on paragraph (2) of the definition of "startup" in 40 CFR 63.10042 for an EGU, the Permittee shall submit a report that identifies EGU and PM control device design characteristics and other information as specified at 40 CFR 63.10030(e)(8)(i)(A) through (K) that shall be prepared, signed, and sealed by a professional engineer licensed in Illinois.

#### 6.5.9 Alternative Requirements

##### a. Notification Requirements:

Pursuant to Section 39.5(7)(b) of the Act and 40 CFR 63.10030(e)(8)(iii)(A),

- i. Except for the emissions averaging provisions set forth in Condition 6.5.9(a), if the Permittee elects to change from compliance with a mass per heat input basis emission limit (e. g., lbs/mmBtu) to a mass per gross output basis emission limit (e. g., lbs/GW-hr) (or vice-versa), the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(7)(iii)(A) through (C).
- ii. If the Permittee elects to switch from the paragraph (1) definition of startup at 40 CFR 63.10042 to the paragraph (2) definition of startup, or vice-versa, the Permittee shall comply with the requirements specified at 40 CFR 63.10030(e)(8)(iii)(A) through (E).
- iii. If the Permittee elects to change other 40 CFR 63 Subpart UUUUU compliance demonstration methods as allowed by Condition 6.5.9(b) through (e) that renders the compliance demonstration methodology information contained in the most recently-submitted Notification of Compliance Status incorrect, the Permittee shall submit an advance notice to Illinois EPA at least 60 days prior to implementing the change. In the advance notice, the Permittee shall include the information necessary for Illinois EPA to determine the applicable requirements pertaining to the change, and any performance stack test results necessary to demonstrate compliance with the new method, if applicable. The Permittee shall comply with written directives issued by Illinois EPA in response to such advance notice, and may proceed with implementing the change if not directed otherwise in writing by Illinois EPA within 45 days after submission of the change notice. The Permittee shall also comply with applicable requirements to submit a revised Notification of Compliance Status to Illinois EPA no later than 60 days following the change.

b. Low Emitting EGU (LEE) Alternative Requirements:

i. LEE Status for mercury (Hg):

An EGU may qualify for LEE status for Hg if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

A. For Hg emissions from an existing EGU, either:

- I. Average emissions less than 10 percent of the applicable Hg emissions limit in Table 2 to 40 CFR 63 Subpart UUUUU (expressed either in units of lbs/TBtu or lbs/GWh); or
- II. Potential Hg mass emissions of 29.0 or fewer pounds per year and compliance with the applicable Hg emission limit in Table 2 to 40 CFR 63 Subpart UUUUU (expressed either in units of lbs/TBtu or lbs/GWh).

B. If test data demonstrate that an affected EGU qualifies for LEE status for the mercury emission standard specified in Condition 6.5.3(b)(i) by satisfying the LEE criteria specified at 63.10005(h)(1)(ii), the Permittee shall conduct performance testing as specified at 63.10005(h)(3) at least once every 12 calendar months, as specified at 40 CFR 63.10000(c)(1)(ii).

C. Pursuant to 40 CFR 63.10006(b)(2), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall install, certify, operate, and maintain a mercury CEMS or sorbent trap monitoring system in accordance with Appendix A to 40 CFR 63 Subpart UUUUU within 6 months of losing LEE eligibility, and conduct quarterly mercury emissions testing until the mercury CEMS or sorbent trap monitoring system is installed, certified, and operating.

ii. LEE Status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals:

An EGU may qualify for LEE status for HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals if the Permittee collects performance test data that meet the requirements of 40 CFR 63.10005(h), and if those data demonstrate:

A. For HCl, filterable PM, total non-Hg HAP metals, or individual non-Hg HAP metals, performance test emissions results less than 50 percent of the applicable emissions limits in Table 2 to 40 CFR

63 Subpart UUUUU for all required testing for 3 consecutive years.

- B. If test data demonstrates that an affected EGU qualifies for LEE status for total non-Hg HAP metals, individual non-Hg HAP metals, filterable particulate matter, or HCl standards specified in Conditions 6.5.9(c) (i) (A) (I), 6.5.9(c) (i) (A) (II), 6.5.3(a) (i), or 6.5.9(d) (i) (A) (I), respectively, by satisfying the LEE criteria specified at 63.10005(h) (1) and (2), the Permittee shall conduct a performance test at least once every 36 calendar months, as specified at 40 CFR 63.10000(c) (1) (iii).
- C. Pursuant to 40 CFR 63.10006(b) (1), if subsequent emission test results show that the affected EGU no longer satisfies the criteria for LEE status, the Permittee shall resume conducting quarterly stack testing for total non-Hg HAP metals, individual non-Hg HAP metals, filterable PM, or HCl or shall install, certify, and operate a PM CEMS, HCl CEMS, SO<sub>2</sub> CEMS, or PM CPMS, as applicable.

c. i. Non-mercury HAP Metals Alternative Requirements:

- A. The Permittee may elect to comply with a non-mercury HAP metals standard as an alternative to the filterable particulate matter standard set forth in Condition 6.5.3(a) (i). Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with one of the following limits either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:
  - I. Emissions of total non-Hg HAP metals from the affected EGUs shall not exceed 0.000050 lb/mmBtu (mass per heat input) or 0.50 lb/GWh (mass per gross output); or
  - II. Emissions of individual non-Hg HAP metals shall not exceed the following limits specified in Table 2 to Subpart UUUUU of 40 CFR Part 63:

Pollutant:	Emission Limit (Mass Per Heat Input):		Emission Limit (Mass Per Gross Output):
Antimony (Sb)	0.80 lb/TBtu	OR	0.0080 lb/GWh
Arsenic (As)	1.1 lb/TBtu	OR	0.020 lb/GWh
Beryllium (Be)	0.20 lb/TBtu	OR	0.0020 lb/GWh
Cadmium (Cd)	0.30 lb/TBtu	OR	0.0030 lb/GWh
Chromium (Cr)	2.8 lb/TBtu	OR	0.030 lb/GWh
Cobalt (Co)	0.80 lb/TBtu	OR	0.0080 lb/GWh

Pollutant:	Emission Limit (Mass Per Heat Input):		Emission Limit (Mass Per Gross Output):
Lead (Pb)	1.2 lb/TBtu	OR	0.020 lb/GWh
Manganese (Mn)	4.0 lb/TBtu	OR	0.050 lb/GWh
Nickel (Ni)	3.5 lb/TBtu	OR	0.040 lb/GWh
Selenium (Se)	5.0 lb/TBtu	OR	0.060 lb/GWh

ii. Non-mercury HAP Metals Alternative Monitoring Provisions:

- A. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.5.3(a)(i) using PM CEMS, the Permittee shall install, certify, operate, and maintain the PM CEMS in accordance with the requirements specified at 40 CFR 63.10010(i) and 63.10020(a) through (d).
- B. If the Permittee elects to demonstrate compliance with the filterable particulate matter emission limit specified in Condition 6.5.3(a)(i) using PM CPMS, the Permittee shall install, certify, operate, and maintain the PM CPMS in accordance with the requirements specified at 40 CFR 63.10010(h) and CFR 63.10020(a) through (d), and Table 6 to 40 CFR 63 Subpart UUUUU.

d. i. Acid Gases Alternative Emission Standards:

- A. The Permittee may elect to comply with a standard for emissions of HCl as an alternative the SO<sub>2</sub> standards set forth in Condition 6.5.3(a)(iii)(A). Pursuant to 40 CFR 63.9991 and Table 2 to Subpart UUUUU of 40 CFR Part 63, for affected EGUs not satisfying the criteria for LEE status, the Permittee may elect to comply with the following limit, either individually or using the applicable emissions averaging provisions of 40 CFR 63.10009 and 63.10022:
  - I. Emissions of Hydrogen Chloride shall not exceed 0.0020 lb/mmBtu (mass per heat input) or 0.020 lb/MWh (mass per gross output).

ii. Acid Gases Alternative Testing Provisions:

Pursuant to 40 CFR 63.10000(c)(1)(v), in order to demonstrate compliance with the emission standard specified in Condition 6.5.9(d)(i), if the affected source does not use an HCl continuous emission monitoring system (HCl CEMS), the Permittee shall demonstrate continuous compliance through HCl performance testing repeated quarterly.

iii. Acid Gases Alternative Monitoring Provisions:

If the Permittee elects to demonstrate compliance with the HCl emission limit specified in Condition 6.5.9(d)(i) using an HCl CEMS, the Permittee shall install, certify, operate, and maintain the HCl CEMS in accordance with the requirements specified at 40 CFR 63.10010(e), 40 CFR 63.10020(a) through (d), and Appendix B to 40 CFR 63 Subpart UUUUU.

e. Mercury Alternative Monitoring Provisions:

The Permittee may elect to monitor emissions of mercury from affected EGUs using a mercury CEMS monitoring system in accordance with 40 CFR 63.10010(g), 40 CFR 63.10020(a) through (d), and Appendix A to 40 CFR 63 Subpart UUUUU, as an alternative to a sorbent trap monitoring system, as described in Condition 6.5.4(a)(ii)(A).

7.0 UNIT SPECIFIC CONDITIONS

7.1 Coal Fired Boilers - Dallman Boiler 31 and 32.

7.1.1 Description

These two boilers are coal-fired boilers for electric generation. Each of the boilers (Boiler 31 and 32), which were built in 1968, have a nominal capacity of 882 mmBtu/hr. They have a common stack. In addition to coal, natural gas is fired as auxiliary fuel during startup and for flame stabilization.

Particulate matter (PM) emissions from the boilers are controlled by electrostatic precipitators (ESP). Sulfur dioxide (SO<sub>2</sub>) emissions from the two Dallman Boilers 31 and 32, are controlled by a single shared flue gas desulfurization (FGD) scrubber system. The nitrogen oxide (NO<sub>x</sub>) emissions from the two Dallman boilers are controlled by their own Selective Catalytic Reduction (SCR) system, which the Permittee currently plans to operate as needed to facilitate compliance with the applicable requirements for NO<sub>x</sub> emissions under the NO<sub>x</sub> Trading Program and Acid Rain Program.

Note: The description in Condition 7.1.1 is for informational purposes only and implies no limits or constraints

7.1.2 List of Emission Units and Air Pollution Control and Monitoring Equipment

Unit I.D.	Description	Emission Control Equipment
Dallman Boiler 31	Babcock and Wilcox Boiler	Individual ESPs and SCRs and shared FGD
Dallman Boiler 32	Babcock and Wilcox Boiler	

7.1.3 Applicability Provisions

- a. i. An "affected boiler", an "affected source", or an "EGU" for the purpose of these unit-specific conditions, is a boiler described in Conditions 7.1.1 and 7.1.2.
- ii. The affected boilers are also "affected sources" for purposes of the National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units, pursuant to 40 CFR 63.9981 and 40 CFR 63.9982(a) (1) because the source owns or operates coal-fired EGUs as defined in 40 CFR 63.10042. These affected facilities are subject to applicable requirements of the NESHAP, 40 CFR 63 Subpart UUUUU and related requirements in the NESHAP, 40 CFR 63 Subpart A, General Provisions. (See Section 6.5 for the applicable requirements for these rules.)

b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate an affected boiler in violation of the applicable standards in Condition 7.1.4(a) (35 IAC 212.123), Condition 7.1.4(b) (IAC 212.202), and Condition 7.1.4(d) (35 IAC 216.121), during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual startups and frequency of startups."

- i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.
- ii. The Permittee shall conduct startup of an affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups and that include, at a minimum, the following measures:
  - A. Use of auxiliary fuel burners to heat the boiler prior to initiating burning of coal.
  - B. Timely energization of the ESP as soon as this may be safely accomplished without damage or risk to personnel or equipment.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(c) and (f) and 7.1.10-2(a).
- iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected boiler in violation of the applicable requirements of Condition 7.1.4(a) (35 IAC 212.123), Condition 7.1.4(b) (35 IAC 212.202), and Condition 7.1.4(d) (35 IAC 216.121), in the event of a malfunction or breakdown of an affected boiler, including associated control equipment and support systems (coal bunkers, coal pulverizers, ash removal and handling systems, etc.). This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has

applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(c) and (g), 7.1.10-2(d) and 7.1.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

#### 7.1.4 Applicable Emission Standards

- a. The opacity from the each affected boiler is subject to 35 IAC 212.123, which provides that:

- i. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 IAC 212.122 [35 IAC 212.123(a)].
  - ii. The emissions of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emission permitted during any 60 minute period shall occur from only one such emission unit located within a 1000 foot radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period [35 IAC 212.123(b)].
- b. The emissions of PM from each affected boiler shall not exceed 0.1 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.202.
  - c. The total emission of SO<sub>2</sub> from the affected boilers and Boiler 33 and Boiler 4 (which are addressed in Sections 7.2 and 7.3, respectively, of this permit) shall not exceed 10,081 lbs/hour, which is equal to or less than that allowed by 35 IAC 214.143, 214.182, and 214.184.

Note: The following formula in 35 IAC 214.184 is used to calculate the allowed SO<sub>2</sub> emissions:

$$E = 0.2222 H^2$$

$$H = P_1H_1 + P_2H_2 + \dots + P_nH_n$$

Where:

E = Total emissions of SO<sub>2</sub>, in pounds per hour, from all fuel combustion emission units owned or operated by such person and located within 1 mile from the center point of any such unit.

P<sub>i</sub> = Percentage of total emissions E emitted from emission unit i divided by 100. (Note: P<sub>1</sub> + P<sub>2</sub> + ... + P<sub>n</sub> = 1)

H<sub>i</sub> = Height in feet above grade of stack i. (Note: The height used may not exceed the good engineering practice [GEP] height for such stack. The actual height of the stacks for the affected boilers is 450 ft (Boilers 31 and 32), 505 ft for Boiler 33 and 450 ft for Boiler 4 but the GEP height is 213 ft.)

- d. Emissions of CO from each affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.

- e. The affected boilers are subject to the following requirements related to NO<sub>x</sub> emissions pursuant to 35 IAC Part 217 Subpart V:
  - i. During each ozone control period (May 1 through September 30):
    - A. The emissions of NO<sub>x</sub> from each pair of affected boilers shall not exceed 0.25 lb/mmBtu of actual heat input based on an ozone control period average, for that unit, pursuant to 35 IAC 217.706(a), or
    - B. If the Permittee elects to participate in a NO<sub>x</sub> averaging plan, the emissions of NO<sub>x</sub> from the pair of affected boilers and other eligible EGU that are participating in such NO<sub>x</sub> averaging demonstration, shall not exceed 0.25 lb/mmBtu of actual heat input, as averaged for the ozone control period for the EGU participating in the demonstration, pursuant to 35 IAC 217.708(a) and (b). For this purpose, other eligible EGU include: (1) EGU at this source, and (2) other EGU that are authorized to participate in a NO<sub>x</sub> averaging plan by a CAAPP permit or other federally enforceable permit issued by the Illinois EPA to the owner or operator of those EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NO<sub>x</sub> for purposes of these standards are generally calculated in accordance with the federal Acid Rain Program and are different from the emissions determined for purposes of the NO<sub>x</sub> Trading Program.

- ii. If the Permittee elects to have an affected boiler comply by participation in a NO<sub>x</sub> averaging demonstration as provided for and authorized above:
  - A. The affected boiler shall be included in only one NO<sub>x</sub> averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).
  - B. The NO<sub>x</sub> averaging demonstration shall only include other EGU that are authorized through a federally enforceable permit to participate in a NO<sub>x</sub> averaging demonstration and for which the owner or operator of the EGU maintains the required records, data and reports and submits copies of such records, data, and reports to the Illinois EPA upon request, pursuant to 35 IAC 217.708 (g).
  - C. The effect of failure of the NO<sub>x</sub> averaging demonstration to show compliance shall be that the compliance status of the affected boiler shall be determined pursuant to Condition 7.1.4(e) (i) (A) as if the NO<sub>x</sub> emission rates of the

affected boiler were not averaged with other EGU, pursuant to 35 IAC 217.708(f).

Note: The above requirements also apply as a matter of rule to EGUs other than the affected boiler if the owner or operator of such other EGUs elects to participate in a NO<sub>x</sub> averaging demonstration.

- f. The applicable requirements of the Acid Rain Program for the affected boilers are addressed in Section 6.1.
- g. The applicable requirements of the Cross-State Air Pollution Rule for the affected boilers are addressed in Section 6.2.
- h. The applicable requirements for Best Available Retrofit Technology for the affected boilers are addressed in Section 6.3.
- i. The applicable requirements of 35 IAC 225 Subpart B for the affected boilers are addressed in Section 6.4.
- j. The applicable requirements of the Mercury and Air Toxics Standards rule for the affected boilers are addressed in Section 6.5.

#### 7.1.5 Non-Applicability Provisions

- a. Pursuant to Section 39.5(7) (a) of the Act:
  - i. The Permittee is shielded from the following rules for the affected boilers when the boilers are using solid fuel (coal) as their principal fuel. This is because incidental use of other fuels generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel.
    - A. 35 IAC 212.207.
    - B. 35 IAC 214.162.
  - ii. If an affected boiler is not using solid fuel (coal) as its principal fuel, the affected boiler shall comply with the requirements of the following conditions. During such periods, for PM, Condition 7.1.5(a) (ii) (A), below, shall substitute for Condition 7.1.4(b). For SO<sub>2</sub>, Condition 7.1.5(a) (ii) (B), below, shall supplement Condition 7.1.4(c):
    - A. The emissions of PM from the affected boiler in any one hour period shall not exceed the amount, in lbs/hr, allowed by the formula in 35 IAC 212.207.

- B. The emissions of SO<sub>2</sub> from the affected boiler in any one hour period shall not exceed the amount, in lbs/hr, allowed by the formula in 35 IAC 214.162.
- iii. For the purpose of the above conditions, an affected boiler shall be considered to be using solid fuel (coal) as its principal fuel if the use of natural gas is incidental to the use of coal, occurring for specific purposes associated with routine firing of solid fuel, such as startup, opacity reduction emission mitigation, flame stabilization, or other temporary interruption in solid fuel supply. A boiler shall not be considered to be using solid fuel as its principal fuel if the use of natural gas is more than incidental to the firing of coal in the boiler or the use of coal is incidental to the operation of the boiler.
- iv. The Permittee shall notify the Illinois EPA if the status of an affected boiler changes to or from using solid fuel (coal) as its principal fuel. This notification shall be provided at least 7 days in advance of such change in status unless the change results from a sudden event that precludes such advance notification, in which case notification shall be provided as soon as practicable prior to the change.
- b. Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity monitoring because the Permittee is conducting opacity monitoring on the affected boiler in accordance with the NSPS and pursuant to the federal Acid Rain program. 40 CFR Part 75.
- c. The affected boilers are not subject to 40 CFR Part 64, Compliance Assurance Monitoring for Major Stationary Sources (CAM) for SO<sub>2</sub> and NO<sub>x</sub> Acid Rain Requirements, because CAM does not apply for Acid Rain Program requirements pursuant to 40 CFR 64.2(b)(1)(iii).
- d. The affected boilers are not subject to 40 CFR Part 64, CAM, for the state standards for SO<sub>2</sub> (Condition 7.1.4(c)) and NO<sub>x</sub> (Condition 7.1.4(e)), pursuant to 40 CFR 64.2(b)(1)(vi), because this CAAPP permit specifies a continuous compliance determination method for these standards.
- e. The affected boilers are not subject to 40 CFR Part 64, CAM, for the State standard for CO (Condition 7.1.4(d)) because the affected boilers do not use add-on control devices to achieve compliance with this standard.
- f. The affected boilers are not subject to 40 CFR Part 64, CAM, for emissions HAPs, as limited by 40 CFR 63 Subpart UUUUUU and addressed in Section 6.5, because these NESHAP emission standards were proposed by the USEPA after November 15, 1990.

- g. The affected boilers are not subject to 40 CFR Part 64, CAM, for mercury emission standards (Condition 6.4.4(a)), because the mercury emissions of the affected boilers do not meet the applicability criteria in 40 CFR 64.2(a)(3) and, pursuant to 40 CFR 64.2(b)(1)(vi), this CAAPP permit specifies a continuous compliance determination method for this standard.
- h. The affected boilers are not subject to 40 CFR 60 Subpart CCCC, Standards of Performance for Commercial and Industrial Solid Waste Incineration Units, because the affected boilers do not combust any solid waste as that term is defined in 40 CFR Part 241.
- i. The affected boilers are not subject to 40 CFR 63 Subpart DDDDD, the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, or 40 CFR 63 Subpart JJJJJJ, the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources. This is because, pursuant to 40 CFR 63.7491(a) and 63.11195(k), an EGU covered by 40 CFR 63 Subpart UUUUU is not subject to 40 CFR 63 Subpart DDDDD or JJJJJJ.

#### 7.1.6 Work Practices

- a. Pursuant to Section 39.5(7)(d) of the Act, as part of its operation and maintenance of the affected boiler, the Permittee shall perform a combustion evaluation on the boiler at least semi-annually:
  - i. This evaluation shall consist of process measurements of the concentration of CO in the flue gas of the affected boiler as well as any adjustments and/or corrective measures undertaken for the combustion systems of the boilers.
  - ii. In a semi-annual period in which the Permittee conducts a tune-up of the EGU burner and combustion controls as specified in Condition 6.5.3(e), such tune-up will satisfy the semi-annual combustion evaluation requirement in Condition 7.1.6(a)(i) for that period.
- b. Natural gas shall be the only fuel fired in the auxiliary burners of the affected boilers [T1].

Note: Requirement of Construction Permit 15040039 issued April 24, 2015.

#### 7.1.7 Testing Requirements

- a. Pursuant to Section 39.5(7)(d)(ii) of the Act, the Permittee shall have the PM and CO emissions of the affected boilers measured as specified below:
  - i. Periodic PM emission measurements shall be made for the affected boiler within a time period determined from the compliance margin for the applicable PM emission standard, based on the results of the

preceding PM measurement, as follows. For this purpose, the compliance margin is the extent to which the actual PM emissions as measured are lower than the applicable PM limit. For example, if the measured PM emissions of the affected boiler are 0.075 lb/mmBtu, the compliance margin for the applicable PM limit, 0.10 lb/mmBtu, would be 25 percent. ( $0.100 - 0.075 = 0.025$ ,  $0.025/0.100 = 0.25$  or 25 percent)

- A. If the compliance margin is less than 20 percent, within 15 months of the previous measurement.
  - B. If the compliance margin is between 20 and 40 percent, within 27 months of the previous measurement.
  - C. If the compliance margin is greater than 40 percent, within 39 months of the previous measurement.
- ii. Measurements of CO emissions shall be made as follows:
- A. In conjunction with the initial measurements of PM emissions as required by Condition 7.1.7(a) (i) (unless this PM measurement is conducted prior to the issuance of this permit), if a measurement of CO emissions is not otherwise performed earlier in conjunction with emission testing or relative accuracy test audit (RATA) for SO<sub>2</sub> or NO<sub>x</sub> conducted under this permit.
  - B. In conjunction with each subsequent measurement of PM emissions made pursuant to Condition 7.1.7(a) (ii) or (iii) (or a RATA for SO<sub>2</sub> or NO<sub>x</sub> preceding such measurement), provided, however, that if measured CO emissions are no more than 100 ppm at 50 percent excess air, CO measurements need not be performed with the next PM measurement (or preceding RATA) but shall be performed with the second measurement of PM emissions following the measurement in which CO emissions were no more than 100 ppm (or a RATA preceding that PM measurement).
- iii. PM emission measurements shall be made within 90 days of operating an affected boiler for more than 72 hours total in a calendar quarter at a load\* that is more than 15 percent higher than the greatest load in Megawatt on the boiler, during the most recent set of PM tests on the affected boiler in which compliance is shown (refer to Condition 7.1.7(e) (iii) (D)), provided, however, that, the Illinois EPA may upon request of the Permittee provide more time for testing (if such time is reasonably needed to schedule and perform testing or coordinate testing with seasonal conditions).

- \* For this purpose, load shall be expressed in terms of either gross megawatt output or steam flow, consistent with the form of the records kept by the Permittee pursuant to Condition 7.1.9(a).
  
- iv. A. If alternative fuel (i.e., any fuel other than coal and natural gas) is greater than 3.0 percent by weight of the fuel burned in a boiler during a calendar quarter, unless measurements for PM and CO emissions have already been conducted while burning alternative fuel at a percentage that is greater than or equal to the percent of those materials burned in that calendar quarter or at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated, the Permittee shall have measurements of PM and CO emissions from the boiler made during the next calendar quarter while firing alternative fuel is burned in the boiler.
  
- B. The Permittee shall conduct such measurements while firing the boiler at the lower of the following: (i) at least 1.25 times the percentage of alternative fuel material in the calendar quarter that triggered the testing; or (ii) at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated. If the boiler has been burning a mix of alternative fuel materials, the mix of fuel during such measurements shall be approved by the Illinois EPA.
  
- C. The Permittee shall repeat such measurements if the percentage of alternative fuel materials burned in a boiler during a quarter is more than the percentage of such material being burned the boiler when previous emission measurements were conducted.
  
- v. Measurements of PM and CO emissions shall be made within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.
  
- b. i. Measurements of PM and CO shall be performed at 90% or greater of the seasonal maximum operating loads of the affected boilers and other operating conditions that are representative of normal operation. In addition, the Permittee may perform measurements at other operating conditions to evaluate variation in emissions.
  
- ii. Measurements shall be taken at an appropriate location in the stack associated with the affected boilers or another location in the exhaust ductwork of an individual boiler as approved by the Illinois

EPA. If both boilers are operating, the boilers and their associated controls shall be operated in a similar manner while measurements are being performed, so that conditions are representative of normal operation for both boilers. If the operation of the affect boilers differs significantly, the Permittee may have to perform further measurements or separate measurements for each boiler at the request of the Illinois EPA, in accordance with Condition 7.1.7(a).

- iii. The following Reference Methods and procedures shall be used for these measurements. Refer to 40 CFR 60, Appendix A for USEPA Methods.

Location of Sample Points	Method 1
Gas Flow and Velocity	Method 2
Flue Gas Weight	Method 3
Moisture	Method 4
Particulate Matter (PM)	Method 5
Carbon Monoxide (CO)	Method 10

Other test methods adopted by USEPA may be used in place of the above methods with the approval of the Illinois EPA

- c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to emission testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230.
  - i. The Permittee shall submit this test plan at least 60 days prior to the actual date of testing and the test plan shall include the information specified by Condition 8.6.2.
  - ii. Notwithstanding the above, as provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emission testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).
- d. The Permittee shall notify the Illinois EPA prior to conducting emission tests to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by case basis accept shorter advance notice if

it would not interfere with the Illinois EPA's ability to observe testing.

- e. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the tests results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:
  - i. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
  - ii. A description of any minor deviations from the test plan, as provided by 35 IAC 283.230(a).
  - iii. Detailed description of operating conditions during testing, including:
    - A. Source(s) of fuel and specifications (ash, sulfur and heat content).
    - B. Boiler operating information, i.e., firing rate of the affected boiler(s) (mmBtu/hr), composition of fuel as burned (ash, sulfur and heat content), and fuel blending ratio (%), if a blend of fuels is burned.
    - C. Combustion system information, i.e., settings for distribution of primary and secondary combustion air, target level for O<sub>2</sub> in the flue gas, and levels of CO, CO<sub>2</sub> or O<sub>2</sub> in the flue gas, as determined by any diagnostic measurements.
    - D. Control equipment information, i.e., equipment condition and operating parameters during testing, including any use of the flue gas conditioning system).
    - E. Load during testing (gross megawatt output and steam flow).
    - F. Information on the usage of alternative fuel materials during testing, if testing was conducted to satisfy Condition 7.1.7(a)(iv).
  - iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
  - v. The SO<sub>2</sub>, NO<sub>x</sub>, O<sub>2</sub> or CO<sub>2</sub>, (hourly averages) and opacity data (6-minute and hourly averages) measured during testing.

7.1.8 Monitoring Requirements

- a. Pursuant to 40 CFR 75.14 and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boilers. For this purpose, "shared" monitoring systems may be operated at locations in the stacks that are common to the two pairs of affected boilers.
  - i. The Permittee shall operate this equipment in accordance with the general provisions for opacity monitoring systems in 40 CFR 75.10.
  - ii. These monitors shall be the primary basis for reporting of exceedances of Condition 7.1.4(a). (See Conditions 7.1.10-2(a) and 7.1.10-3(a).)
- b. Pursuant to 40 CFR 75.11 and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous emission monitoring systems (CEMS) for the measurement of SO<sub>2</sub> emissions from the affected boilers.
  - i. These CEMS shall be used to demonstrate compliance with the limit in Condition 7.1.4(c) based on the average hourly SO<sub>2</sub> emission rate determined from monitored data from three-hour block averaging periods.
- c. Pursuant to 40 CFR 75.12, 35 IAC 217.710(a), and Section 39.5(7)(d)(iii) of the Act, the Permittee, shall install, calibrate, maintain and operate CEMS for the measurement of NO<sub>x</sub> emissions from the affected boilers, in accordance with the requirements of 40 CFR 75 Subpart B.
- d. Pursuant to Section 412 of the Clean Air Act and 40 CFR Part 75, the source is required to operate continuous monitors for the affected boilers for various parameters, including SO<sub>2</sub>, NO<sub>x</sub>, volumetric flow, the diluent (O<sub>2</sub> or CO<sub>2</sub>) and opacity, along with a computerized data acquisition and handling system for collected data. (See also Condition 6.1.3) To the extent that applicable performance specifications and operating requirements for monitoring under 40 CFR Part 75 are inconsistent with the above requirements for monitoring, the procedures of 40 CFR Part 75 shall take precedence. (See also Condition 8.2)
- e. Compliance Assurance Monitoring (CAM) Requirements

The affected boilers are subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The Permittee shall comply with the monitoring requirements of the CAM Plan described in Table 4.1 in Section 10.4 (Attachment 4), pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine

repairs of the monitoring equipment [40 CFR 64.7(a) and (b)].

i. Continued Operation [40 CFR 64.7(c)]

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

ii. Response to Excursions or Exceedances [40 CFR 64.7(d)]

- A. Upon detecting an excursion or exceedance, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- B. Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited

to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device.

7.1.9 Recordkeeping Requirements

a. Records for Boiler Operation

Pursuant to Sections 39.5(7) (a) and (e) of the Act, the Permittee shall maintain the following operational records for the affected boilers:

- i.
  - A. Load, in terms of either gross megawatts output or steam flow, on an hourly basis for each affected boiler.
  - B. If the Permittee is relying on data for heat input for purposes of compliance with Condition 7.1.4(b) or Condition 7.1.4(c) that is different from that recorded pursuant to the federal Acid Rain Program, records of heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load as recorded above to hourly heat input.
- ii. Records for each day when an alternative fuel (i.e., a fuel material other than coal or natural gas), were burned, including the estimated amount of each such material burned and the affected boiler(s) in which it was burned.
- iii. Total operating hours (hours/quarter) and for each pair of affected boilers (hours when fuel is fired in one or both boilers).
- iv.
  - A. Records for the amount of coal consumed (tons/quarter).
  - B. Amount of each other fuel material consumed (tons, gallons or cubic feet per quarter, as appropriate).
  - C. Records for the total amount of natural gas burned by the auxiliary burners (cubic feet/calendar year).
- v.
  - A. Records of agreements with suppliers of alternative fuel(s) for the boilers, including origin of material, specifications for heat and ash content, and representative data for elemental composition of such material, including mercury and other heavy metals, chlorine and fluorine.
  - B. Records for each load of such material received at the source, which at a minimum shall include date, supplier name, type of material and amount (tons).

vi. Operating records and maintenance and repair records, for each affected boiler documenting the performance of the combustion evaluation required by Condition 7.1.6(a), including the date of the evaluation, the concentrations of CO measured at the start and conclusion of the evaluation, and a description of adjustments and preventative and corrective measures undertaken for the combustion systems of the boiler.

b. Records for Control Equipment

Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall maintain the following operating records for the air pollution control equipment on each affected boiler:

i. Maintenance and Repair Records

A maintenance and repair record for each control device, which shall list the activities performed, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

ii. SCR Systems (Boiler 31 and 32)

A. Manufacture/vendor or Permittee developed operating and maintenance procedures.

B. Operating records for the system, including reagent usage and system settings.

C. The maintenance and repair record for the SCR system shall also address activities related to the SCR catalyst, including addition or replacement of catalyst.

iii. Electrostatic Precipitators (ESP)

When an affected boiler is in operation:

A. The status of each ESP field shall be recorded at least once per shift.

B. The following numerical data shall be recorded at least once per day: (1) Primary voltages and currents; (2) Secondary voltages and currents; and (3) Sparking rates.

iv. FGD Scrubber System (Boilers 31 and 32)

A. Manufacture/vendor or Permittee developed operating and maintenance procedures.

B. Operating records, including daily usage of limestone or scrubbant.

c. Records for Continuous Opacity Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the opacity monitoring system on the affected boilers required by Condition 7.1.8(a) that at a minimum shall include:

- i. Operating records for each opacity monitoring system, including:
  - A. Opacity measurements.
  - B. Continuous monitoring system performance testing measurements.
  - C. Performance evaluations and other quality assurance/control activities.
  - D. Calibration checks.
  - E. Maintenance and adjustment performed.
  - F. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason.
  - G. Quarterly reports submitted in accordance with Condition 7.1.10-2(a) and (d).
- ii. Records to address compliance with Conditions 7.1.4(a) and (b), including:
  - A. Each 6-minute period when the opacity was above the limitation of Condition 7.1.4(a) (30 percent opacity) with date, time, whether it occurred during startup, malfunction, breakdown, or shutdown, and further explanation of the incident.

d. Records for Continuous SO<sub>2</sub> Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the SO<sub>2</sub> CEMS on the affected boilers required by Condition 7.1.8(b) that as a minimum shall include the following:

- i. Operating records for the SO<sub>2</sub> CEMS, including:
  - A. SO<sub>2</sub> emission measurements.
  - B. Continuous monitoring system performance testing measurements.
  - C. Performance evaluations and other quality assurance/control activities.
  - D. Calibration checks.

- E. Maintenance and adjustments performed.
  - F. Periods when the SO<sub>2</sub> CEMS was inoperative, with date, time and reason.
  - G. Data reduction information.
  - H. Quarterly reports submitted in accordance with Conditions 7.1.10-2(a) and (b).
- ii. Records to verify compliance with the limit of Condition 7.1.4(c), including:
- A. SO<sub>2</sub> emissions in the terms of the applicable SO<sub>2</sub> (lbs/hr) from the affected boilers on an hourly basis, as derived from the data obtained by the SO<sub>2</sub> CEMS.
  - B. The date and time of any three-hour block averaging period when the total SO<sub>2</sub> emission rate from the affected boilers and Boiler 33 and Boiler 4, exceeded 10,081 lbs/hour as allowed by Condition 7.1.4(c), with the calculated SO<sub>2</sub> emission rate. These records shall be prepared from the above records and records for Boiler 33 and Boiler 4 at least quarterly as needed to verify compliance with the limitation of Condition 7.1.4(c).
- e. Records for Continuous NO<sub>x</sub> Monitoring

Pursuant to 39.5(7)(e) of the Act and 35 IAC 217.712(a), the Permittee shall maintain records for the NO<sub>x</sub> CEMS on the affected boilers required by Condition 7.1.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, that as a minimum shall include the following:

- i. Operating records for the NO<sub>x</sub> CEMS, including:
- A. NO<sub>x</sub> emission measurements.
  - B. Continuous monitoring system performance testing measurements.
  - C. Performance evaluations and other quality assurance/control activities.
  - D. Calibration checks.
  - E. Maintenance and adjustments performed.
  - F. Periods when CEMS was inoperative, with date, time and reason.
  - G. Data reduction information.

- H. Quarterly reports submitted in accordance with Conditions 7.1.10-2(a) and (c).
- f. Records for Startups of Affected Boilers, pursuant to Section 39.5(7) (b) of the Act
  - i. The Permittee shall maintain written startup procedures for each affected boiler, as required by Condition 7.1.3(b) (ii).
  - ii. The Permittee shall maintain the following records related to startups of an affected boiler:
    - A. For all startups on each affected boiler.
      - I. Date, time and duration of the startup.
      - II. A description of the startup and reason(s) for the startup with additional documentation showing that written startup procedures were followed including any deviations from established procedures and the reason the procedure could not be followed.
    - B. For each startup of an affected boiler where an exceedance from a relevant standard did or may have occurred during startup, maintain the following additional records for such startups.
      - I. Identification of the applicable standard(s) that were or may have been exceeded.
      - II. An explanation of the nature of such exceedance(s), including the magnitude of such excess emissions.
      - III. A description of the actions taken or to be taken to minimize the magnitude and duration of excess emissions.
      - IV. An explanation whether similar incidents could be prevented or ameliorated in the future and if so, a description of the actions taken or to be taken to prevent similar incidents in the future.
    - C. For each startup when an exceedance of a relevant standard occurred or the duration of startup from initial firing of fuel to stable operation of the generating unit at load exceeded 18.5 hours maintain the following additional records for such startups.
      - I. A description of the events that led up to the extended startup duration.

II. The reason(s) for the extended startup duration.

III. An explanation of the consequences of the prolonged startup as it relates to the magnitude of emissions, including:

1. The actions taken to minimize emissions and the duration of the startup, and
2. An explanation whether similar incidents might be prevented in the future and if so, the corrective actions taken or to be taken to prevent similar incidents.

g. Records for Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown of the affected boilers:

- i. Maintenance and repair records for the affected boilers that, at a minimum, address aspects or components of the boilers for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, with date, description and reason for the activity. In addition, in the maintenance and repair records for control equipment required by Condition 7.1.9(b) (i), the Permittee shall also list the reason for the activities that are performed.
- ii. Records for each incident when operation of an affected boiler continued with excess emissions, including malfunction or breakdown as addressed by Condition 7.1.3(c), that, at a minimum, include the following information:
  - A. Date, time, duration and description of the incident.
  - B. The corrective actions used to reduce the quantity of emissions and the duration of the incident.
  - C. Confirmation of fulfillment of the requirements of Condition 7.1.10-3(a), as applicable, including copies of follow-up reports submitted pursuant to Condition 7.1.10-3(a) (ii).
  - D. If opacity exceeded the applicable standard for two or more hours or emissions exceeded or may have exceeded an applicable hourly standard, as listed in Condition 7.1.4, during the incident:

- I. A detailed explanation why continued operation of the affected boiler was necessary.
- II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boilers and associated equipment and any changes to operating and maintenance procedures.
- III. An estimate on a qualitative or, if available, quantitative basis of whether emissions of PM and CO during the incident may have exceeded any applicable hourly standard.

h. Acid Rain Program

Records for the continuous emission monitoring required for the affected boiler by the Acid Rain Program shall be kept by the source in accordance with 40 CFR Part 75, including the General Recordkeeping Provisions, the General Recordkeeping Provisions for Specific Situations, if applicable; and Certification, Quality Assurance and Quality Control Record Provisions [See Condition 6.1.3].

i. Records for Compliance Assurance Monitoring (CAM) Requirements

The Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, and other supporting information related to the monitoring requirements in Condition 7.1.8(e) as required by 40 CFR 64.9(b) (1).

7.1.10-1 Reporting Requirements - Reporting of Deviations

a. Prompt Reporting of Deviations

For each affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. At a minimum, these notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the possible cause of such deviations, any corrective actions and any preventative measures taken [Section 39.5(7)(f)(ii) of the Act].

- i. Notification and reporting as specified in Condition 7.1.10-3(a) for certain deviations from the PM limit in Condition 7.1.4(b).
- ii. Notification and reporting as specified in Condition 7.1.10-3(a) for certain deviations from the opacity limit in Condition 7.1.4(a).

- iii. Notification with the reports required by Conditions 7.1.10-2(b), (c), (d) and (e) for deviations from Condition 7.1.4(a), (b), (c), and (e) and from the requirements of Condition 7.1.8 for emissions monitoring.
- iv. Notification with the quarterly reports required by Condition 7.1.10-2(a) for deviations not addressed above by Conditions 7.1.10-1(a)(i), (ii) or (iii), including deviations from other applicable requirements, e.g., the applicable CO emission standard, work practice requirements, and recordkeeping requirements.

b. Periodic Reporting of Deviations

The quarterly reports required by Condition 7.1.10-2(a) shall include the following information for the affected boilers related to deviations from permit requirements during the quarter [Sections 39.5(7)(a) and (f)(i) of the Act].

- i. A listing of all instances of deviations that have been reported in writing to the Illinois EPA as provided by Condition 7.1.10-1(a)(i) and (ii), including identification of each such written notification or report. For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.
- ii. Detailed information, as required by Condition 7.1.10-1(a)(iii) or (iv), for all other deviations not addressed in the above listing.

7.1.10-2 Reporting Requirements - Periodic Reporting

a. Quarterly Reports

In place of the semi-annual monitoring reports otherwise required by Condition 8.6.1, the Permittee shall submit quarterly report to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act.

- i. These reports shall include the following information for operation of the affected boiler during the quarter:
  - A. The total operating hours for each affected boiler, as also reported in accordance with 40 CFR Part 75.
  - B. The greatest load achieved by each affected boiler (steam flow or gross megawatts), and total number of hours in which an affected boiler exceeded a load that was more than 15 percent higher than the greatest load in Megawatt on the boiler during the most recent set of PM tests required by Condition 7.1.7(a)(iii).

- C. A discussion of significant changes in the fuel supply to the affected boilers, if any, including changes in the source of coal, the introduction of new fuel materials other than coal and natural gas, and changes in the source of such other fuel materials or the maximum rate at which they will be fired.
  - D. A list of the startups of each affected boiler, including the date, duration and description of each startup. When any startup resulted in an exceedance, a copy of the records required in 7.1.9(f)(ii)(B) and(C), shall be included in this report when such records were required.
  - E. A copy of the records required by Condition 7.1.9(c)(ii)(A), (B) and (C) identifying the date and time that the opacity was exceeded, with operating condition if startup, malfunction, breakdown, or shutdown; with further description of the incident and whether particulate matter emissions may have exceeded the PM limit.
- ii. These reports shall include the information for SO<sub>2</sub>, NO<sub>x</sub>, and PM emissions and opacity from the affected boiler during the quarter and the operation of required continuous monitoring systems specified by Conditions 7.1.10-2(b), (c) and (d).
  - iii. A. These reports shall be submitted after the end of every calendar quarter as follows:

Monitoring Period	Submittal Deadline
January - March	May 15
April - June	August 15
July - September	November 15
October - December	February 15
  - B. Notwithstanding the above, the first four quarterly reports required pursuant to this permit shall be submitted no later than 60 days after the end of each calendar quarter.

b. Reporting of SO<sub>2</sub> Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Summary information on the performance of each SO<sub>2</sub> CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the SO<sub>2</sub> CEMS was not operated, repaired, or adjusted except

for zero and span checks, this shall be stated in the report.

ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boiler: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was out-of-control as addressed by 40 CFR 75.24.

iii. The following information for each period when SO<sub>2</sub> emissions were in excess of the limit in Condition 7.1.4(c)\*. When there were no such exceedances, this shall be stated in the report.

- A. The starting date and time of the SO<sub>2</sub> excess emissions.
- B. The duration of the excess emissions.
- C. A copy of the records for the excess emissions, as maintained pursuant to Condition 7.1.9(d) (ii), including the measured emission rate.
- D. A detailed explanation of the cause of the excess emissions.
- E. A detailed explanation of corrective actions and actions taken to lessen the emissions.

\* For SO<sub>2</sub> emissions, the averaging period is a three-hour block average, as used to determine compliance with the limitations of Condition 7.1.4(c). The records for excess emissions shall consist of three-hour block emission averages during which the limitation was exceeded.

c. Reporting of NO<sub>x</sub> Emissions

Pursuant to Sections 39.5(7) (a) and (f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

i. Summary information on the performance of each NO<sub>x</sub> CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the NO<sub>x</sub> CEMS was not operated, repaired or adjusted except for zero and span checks, this shall be stated in the report.

ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boiler: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.

d. Reporting Related to Opacity and PM Emissions

Pursuant to Sections 39.5(7)(b) and (f) of the Act, the Permittee shall report the following information for each affected boiler to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

- i. Information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" in accordance with 40 CFR 60.7(d). Additionally, the quarterly report shall also include:
- A. The total operating time of the affected boiler; and
  - B. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative except for zero and span checks.
- ii. When no excess opacity occurred or the continuous opacity monitoring system has not been inoperative, repaired or adjusted such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
- iii. The following information for each period when opacity was in excess of the limit in Condition 7.1.4(a).
- A. The starting dates and time of the excess opacity.
  - B. The duration of the exceedance.
  - C. The magnitude of excess opacity, based on six minute average opacity, including:
    - I. The percent opacity for each six-minute period.
    - II. The start and stop time of each six-minute period in excess of the limitation.

- D. The cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of the boiler, including which boiler(s) were contributing to excess opacity
- E. Any corrective actions taken.
- F. Identification of any previous report for the incident submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a) (ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
- G. Information required by Conditions 7.1.9(g) (ii) (A), (B), and (D) (I) for incidents when operation of the affected boiler continued during malfunction or breakdown with excess emissions that are not addressed by individual reports submitted pursuant to Condition 7.1.10-3(a) (ii).

Note: Because the Permittee is reporting in accordance with the requirements of the NSPS, 40 CFR 60.7(c) and (d) for the affected boiler for opacity, pursuant to the Federal Acid Rain Program, as included above, the Permittee is not subject to reporting pursuant to 35 IAC 201.405 (35 IAC 201.403(a)).

iv. The following information for periods when PM emissions were in excess of the limitation in Condition 7.1.4(b). If there were no such exceedances during the reporting period, the quarterly report shall so state.

- A. A summary of information for each period of exceedance that includes:
  - I. The starting date and time of the exceedance.
  - II. The duration of the exceedance.
  - III. The magnitude of the exceedance.
  - IV. The percent opacity measured for each six-minute period during the exceedance.
  - V. The means by which the exceedance was indicated or identified, in addition to the level of opacity.
  - VI. The cause of the exceedance, including whether the exceedance occurred during startup, malfunction or breakdown.

VII. Corrective actions and actions taken to lessen the emissions.

- B. Identification of the previous reports for the incidents submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
- v. The following summary information related to opacity and PM exceedances:
- A. Further information for each type of recurring opacity exceedance that occurred during the quarter, including: a discussion of any circumstances or events during the quarter that generally affected the number or magnitude of such exceedances; a discussion of any additional understanding of the causes for such exceedances gained during the quarter, including the role of component failure or degradation, maintenance practices, and operating procedures; a general discussion of the effectiveness of the corrective actions that were taken in response to such exceedances; and a general discussion of further actions that are being considered to address such exceedances.
  - B. Further information for any new type(s) of opacity exceedances that occurred during the quarter including: a general narrative description for the type(s) of exceedance; a general explanation of the cause(s) for such exceedances, including the role of component failure or degradation, maintenance practices, and operating procedures; a detailed explanation of the corrective actions that have been taken for such exceedances, including the reasons that the selected actions were taken, the effectiveness of those actions, and the likelihood of future occurrence of similar exceedances; and a general discussion of possible further actions that could be taken to address such exceedances. For this purpose, new type(s) of exceedance are ones that have not been addressed in the preceding four quarterly opacity reports.
  - C. Other information relevant to generally explaining the number and magnitude of opacity and PM exceedances during the quarter, e.g., a further discussion of specific events or circumstances that occurred that affected the number of magnitude or exceedances during the quarter.
  - D. Information describing actions taken during the quarter that should generally act to

significantly reduce the number or magnitude of future opacity or PM exceedances, e.g., a summary of relevant upgrades or replacements of components that were completed, with a description of such actions, an explanation of their relationship to exceedances, and a discussion of their anticipated effect on future exceedances.

- vi. A glossary of common technical terms used by the Permittee in its reports pursuant to this Condition 7.1.10-2(d), including the definitions for the categories used by the Permittee to classify exceedance events.

e. Reporting of NO<sub>x</sub> Emissions for the Ozone Control Period

The Permittee shall submit a report to the Illinois EPA by November 30 of each year that demonstrates whether the affected boilers have complied with Condition 7.1.4(e), pursuant to 35 IAC 217.712(d) and (e).

- i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.1.4(e) (i) (A), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and NO<sub>x</sub> emissions of the unit for the ozone control period.
- ii. If the Permittee is demonstrating compliance by means of "NO<sub>x</sub> averaging" as authorized by Condition 7.1.4(e) (ii) (B), this report shall contain the information specified by 35 IAC 217.712(e) and other related information as follows:
  - A. In all cases, for each affected boiler or unit covered by this permit that is participating in the NO<sub>x</sub> averaging demonstration, the Permittee shall report the following:
    - I. Identification of the other EGU that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.1.10-2(e) (ii) (B) below.
    - II. A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).
    - III. The average NO<sub>x</sub> emission rate for the unit, with calculations and supporting

information, as required by 35 IAC 217.712(e) (2) and (3), including the heat input and NO<sub>x</sub> emissions of the unit for the ozone control period.

IV. A statement whether the unit would show compliance on its own in the absence of averaging.

B. If the Permittee is the lead party for a NO<sub>x</sub> averaging demonstration, the Permittee shall report the following:

I. Copies of the information submitted by other parties for the EGU participating in the demonstration, which include all material required by Condition 7.1.10-2(e) (ii) (A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).

II. The averaged NO<sub>x</sub> emission rate for all EGU participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e) (1).

III. A statement whether the demonstration shows compliance.

f. Submittal of Supplemental Information Related to NO<sub>x</sub> Emissions during the Ozone Control Period

The Permittee shall submit copies of any records and data required by 35 IAC 217.712 to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA [35 IAC 217.712(g)].

g. Acid Rain Program Reporting

Pursuant to Section 412 of the Clean Air Act and 40 CFR Parts 72 and 75, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application; Quarterly Reports; and Opacity Reports [See Condition 6.1.3].

h. Reporting of Compliance Assurance Monitoring (CAM)

The Permittee shall submit monitoring reports to the Illinois EPA in accordance with Condition 8.6.1 and shall include, at a minimum, the information required under Condition 8.6.1 and the following information:

i. Summary information on the number, duration, and cause of excursions or exceedances, and the corrective actions taken [40 CFR 64.6(c) (3) and 64.9(a) (2) (i)]; and

- ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks [40 CFR 64.6(c)(3) and 64.9(a)(2)(ii)].

#### 7.1.10-3 Reporting Requirements - Notifications

- a. Reporting of Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7)(a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA, Compliance Section and Regional Office, concerning incidents when operation of an affected boiler, or associated support system, continued with excess emissions, including continued operation during malfunction or breakdown as addressed by Condition 7.1.3(c). These requirements do not apply to such excess emissions, if any that occur during startup or shutdown of the affected boiler.

- i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity from a unit exceeds 30 percent for eight or more 6-minute averaging periods unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during an incident only exceeds 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Conditions 7.1.10-1(b) and 7.1.10-2(d).)
  - ii. Upon conclusion of each incident in which the applicable PM emission standard may have been exceeded or in which exceedances of the opacity standard was two hours or more in duration, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days that includes: a detailed description of the incident and its cause(s); an explanation why continued operation of an affected boiler was necessary; the length of time during which operation continued under such conditions, until repairs were completed or the boiler was taken out of service; a description of the measures taken to minimize and correct deficiencies with chronology; and a description of the preventative measures that have been and are being taken.
- b. Startups that resulted in excess emissions shall be addressed in the reports as required by Condition 7.1.10-2(a) accompanied by the records required in Condition 7.1.9(f)(ii)(B).

7.1.11 Anticipated Operating Scenarios/Operating Flexibility

The Permittee is authorized to make the following operational changes with respect to each affected boiler without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7) (a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC 201.102 or 40 CFR 52.21(a) (2); and to comply with other legal requirements that apply to such a change:

- a. Operation of additional air pollution control equipment, which is addressed by a separate construction permit.
- b. Firing of coal or a mix of coal from different suppliers.
- c. Firing of the following materials in conjunction with firing of standard fuels, provided that such materials can be accommodated with the existing fuel handling system and the burners in the affected boilers, and that such materials do not make up more than 10 percent by weight of the fuel supply to the boiler on a quarterly basis:
  - i. Used oil and boiler cleaning residue generated at the source.
  - ii. Alternative fuels that do not constitute waste and were not generated from municipal waste or hazardous waste, provided that such fuels are shipped to the source in homogeneous form prepared for use as fuel (e.g., a shipment of tire derived fuel). Such alternative fuels include materials such as petroleum coke, tire derived fuel (as defined at Section 54.10b of the Act), clean lumber, shredded polyethylene agricultural containers, and seed corn.

Note: Other requirements unrelated to air pollution control may apply to firing of alternative fuels, such as Standards for Management of Used Oil, 35 IAC Part 739.

7.1.12 Compliance Procedures

- a.
  - i. Compliance with the opacity limit of Conditions and 7.1.4(a) (30 percent opacity) is addressed by the average opacity calculated from 6-minute periods of opacity measurements from the continuous opacity monitoring systems operated in accordance with the requirements of Condition 7.1.8(a) and the recordkeeping requirements of Conditions 7.1.9.
  - ii. Notwithstanding Condition 7.1.12(a) (i) above, should the Permittee choose to rely on 35 IAC 212.123(b) to allow opacity greater than 30 percent (6-minute average) from an affected boiler, the Permittee shall do the following:

- A. Maintain records for each pair of affected boilers of short-term opacity data, that is, either a continuous chart recording of measured opacity, a record of discrete measurements of opacity taken no more than 15 seconds apart, or a record of 1-minute average opacity data determined from four or more data points equally spaced during each minute period, to determine whether opacity from the boilers exceeded 30 percent opacity.
  - B. Have the capability to review such short-term opacity data for the affected boilers to identify:
    - 1. Any hour in which opacity exceeded 30 percent, and then, for such hour: (1) the duration of opacity in excess of 30 percent; (2) whether opacity ever exceeded 60 percent; and (3) whether the duration of opacity in excess of 30 percent was more than 8 minutes in aggregate.
    - 2. For each pair of affected boiler, whether opacity in excess of 30 percent occurred in more than three hours in a 24 hour period.
  - C. For other emission units at the source, have the ability to review short-term opacity data representative of such units during hours in which the opacity of the affected boiler on a short-term basis may exceed 30 percent, to confirm that the opacity of any other unit at the source did not exceed 30 percent in any minute during an hour in which the short-term opacity of the affected boiler may have exceeded 30 percent.
  - D. In the reports required by Condition 7.1.10-2(d), confirm that the relevant short-term opacity data, reviewed as above, shows that the terms of 35 IAC 212.123(b) are satisfied, when 35 IAC 212.123(b) is relied upon as the basis to claim that affected boilers did not violate Conditions 7.1.4(a) even though opacity on a 6-minute average exceeded 30 percent.
  - E. Notify the Illinois EPA at least 15 days prior to changing its procedures associated with reliance on 35 IAC 212.123(b), to allow the Illinois EPA to review the new recordkeeping and data handling practices planned by the Permittee.
- b. Compliance with PM emission limit of Condition 7.1.4(b) is addressed by continuous opacity monitoring in accordance with Condition 7.1.8(a), PM testing in accordance with Condition 7.1.7, and the recordkeeping required by Conditions 7.1.9.

- c. Compliance with the SO<sub>2</sub> emission limitation of Condition 7.1.4(c) is addressed by continuous emission monitoring in accordance with Condition 7.1.8(b) and the recordkeeping required by Condition 7.1.9(d).
- d. Compliance with the CO emission limit of Condition 7.1.4(d) is addressed by the, required work practices in Condition 7.1.6(a), emission testing in accordance with Conditions 7.1.7 and the recordkeeping required by Condition 7.1.9.
- e. Compliance with NO<sub>x</sub> emission limit of Condition 7.1.4(e) is addressed by the continuous emissions monitoring and recordkeeping required by Conditions 7.1.8(c) and 7.1.9(e), respectively.
- f. Compliance with the work practices required by Condition 7.1.6(a) is addressed by the recordkeeping required by Condition 7.1.9.

Note: This condition is included in this permit pursuant to Section 39.5(7) (p) (v) of the Act.

7.2 Coal Fired Boiler - Dallman Boiler 33 (Subject to NSPS, 40 CFR 60 Subpart D)

7.2.1 Description

The Permittee operates a third coal-fired boiler for electric generation. This boiler is served by its own stack. This boiler was built in 1975 and has a nominal capacity of 2120 mmBtu/hour. In addition to coal, natural gas is fired as an auxiliary fuel during startup and for flame stabilization.

Nitrogen oxide (NO<sub>x</sub>) emissions from the boiler are controlled by a Selective Catalytic Reduction (SCR) system, which was recently installed pursuant to Construction Permit #01090010. This system is operated at the discretion of the Permittee as needed to facilitate compliance with the requirements of the Acid Rain Program and NO<sub>x</sub> Trading Program. Particulate matter (PM) emissions from the boiler are controlled by an electrostatic precipitator (ESP). Sulfur dioxide (SO<sub>2</sub>) emissions are controlled by a flue gas desulfurization (FGD) scrubber system.

Note: The description in Condition 7.2.1 is for informational purposes only and implies no limits or constraints

7.2.2 List of Emission Units and Air Pollution Control Equipment

Unit I.D.	Description	Emission Control Equipment	Monitoring Equipment
Dallman Boiler 33	Combustion Engineering Boiler	SCR, ESP and FGD	Opacity COMS, SO <sub>2</sub> CEMS, NO <sub>x</sub> CEMS, Hg STMS

7.2.3 Applicability Provisions

- a. i. The "affected boiler", the "affected source", or the "EGU" for the purpose of these unit-specific conditions, is the boiler described in Conditions 7.2.1 and 7.2.2.
- ii. The affected boiler is also an "affected facility" for purposes of the New Source Performance Standards (NSPS) for Fossil-Fuel Fired Steam Generators for Which Construction Is Commenced After August 17, 1971, pursuant to 40 CFR 60.40. As an affected facility, the boiler is subject to applicable requirements of the NSPS, 40 CFR 60 Subpart D and related requirements in the NSPS, 40 CFR 60 Subpart A, General Provisions.

b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate the affected boiler in violation of the applicable standards in Condition 7.2.4(b) (35 IAC 212.122), Condition 7.2.4(c) (35 IAC 212.204), and Condition 7.2.4(d) (35 IAC 216.121) during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its

application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual startups and frequency of startups."

- i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.
- ii. The Permittee shall conduct startup of the affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups and that include, at a minimum, the following measures:
  - A. Use of auxiliary fuel burners to heat the boiler prior to initiating burning of coal.
  - B. Timely energization of the ESP as soon as this may be safely accomplished without damage or risk to personnel or equipment.
  - C. Appropriate limestone injection for the FGD system to minimize excess emissions without damage or risk to personnel or equipment.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.2.9(c) (d), (e) and (f) and 7.2.10-2(a).
- iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following provisions, the Permittee is authorized to continue operation of the affected boiler in violation of the applicable requirements of Condition 7.2.4(b) (35 IAC 212.122), Condition 7.2.4(c) (35 IAC 212.204), and Condition 7.2.4(d) (35 IAC 216.121) in the event of a malfunction or breakdown of the affected boiler, including the associated control equipment and support systems (limestone handling system, coal bunkers, coal pulverizers, ash and gypsum removal and handling systems, etc.). This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures

that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.2.9(c), (d), (e) and (g), 7.2.10-2(d) and 7.2.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.
- iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

#### 7.2.4 Applicable Emission Standards

##### a. Federal NSPS standards

- i. The affected boiler is subject to New Source Performance Standards (NSPS) for Fossil Fuel Fired Steam Generators, 40 CFR 60, Subpart D. The Illinois EPA is administering NSPS on behalf of the USEPA under a delegation agreement.

- ii. Pursuant to the NSPS, emissions from the affected boiler shall not exceed the following emission standards:

<u>Pollutant</u>	<u>Standard (Lbs/mmBtu)</u>	<u>Rule</u>
PM	0.10	40 CFR 60.42 (a) (1)
SO <sub>2</sub>	1.20	40 CFR 60.43 (a) (2)
NO <sub>x</sub>	0.70	40 CFR 60.44 (a) (3)

- iii. Opacity from the affected boiler shall not exceed 20 percent, as measured on a six minute average, except for one 6 minute period per hour of not more than 27 percent pursuant to NSPS, 40 CFR 60.42(a) (2).

- iv. Pursuant to 40 CFR 60.8(c), the above emission limitations in Conditions 7.2.4(a) (ii) and (iii) do not apply during startup, malfunction, and shutdown, as defined by 40 CFR 60.2. Notwithstanding this provision, exceedances of these limits during startup, malfunction, and shutdown are still subject to recordkeeping and reporting requirements under the NSPS.

- b. The affected boiler is subject to 35 IAC 212.122, which provides that no person shall cause or allow the opacity from a new fuel combustion emission unit with a heat input greater than 250 mmBtu/hr to exceed 20 percent, except as provided by 35 IAC 212.122(b).
- c. The emissions of PM from the affected boiler shall not exceed 0.1 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.204.
- d. The emissions of CO from the affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.
- e. The affected boiler is subject to the following requirements related to NO<sub>x</sub> emissions pursuant to 35 IAC Part 217 Subpart V:
- i. During each ozone control period (May 1 through September 30):
- A. The emissions of NO<sub>x</sub> from the affected boiler shall not exceed 0.25 lb/mmBtu of actual heat input based on an ozone control period average, pursuant to 35 IAC 217.706(a), or
- B. If the Permittee elects to participate in a NO<sub>x</sub> averaging plan, the emissions of NO<sub>x</sub> from the affected boiler and other eligible EGU that are participating in such NO<sub>x</sub> averaging demonstration shall not exceed 0.25 lb/mmBtu of actual heat input, as averaged for the ozone control period for the EGU participating in the demonstration,,

pursuant to 35 IAC 217.708(a) and (b). For this purpose, other eligible EGU include: (1) other EGU at this source, and (2) other EGU that are authorized to participate in a NO<sub>x</sub> averaging plan by a CAAPP permit or other federally enforceable permit issued by the Illinois EPA to the owner or operator of those EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NO<sub>x</sub> for purposes of these standards are generally calculated in accordance with the federal Acid Rain Program and are different from the emissions determined for purposes of the NO<sub>x</sub> Trading Program.

- ii. If the Permittee elects to have the affected boiler comply by participation in a NO<sub>x</sub> averaging demonstration as provided for and authorized above:
  - A. The affected boiler shall be included in only one NO<sub>x</sub> averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).
  - B. The NO<sub>x</sub> averaging demonstration shall only include other EGU that are authorized through a federally enforceable permit to participate in a NO<sub>x</sub> averaging demonstration and for which the owner or operator of the EGU maintains the required records, data and reports and submits copies of such records, data, and reports to the Illinois EPA upon request, pursuant to 35 IAC 217.708(g).
  - C. The effect of failure of the NO<sub>x</sub> averaging demonstration to show compliance shall be that the compliance status of the affected boiler shall be determined pursuant to Condition 7.2.4(e) (i) (A) as if the NO<sub>x</sub> emission rates of the affected boiler were not averaged with other EGU, pursuant to 35 IAC 217.708(f).

Note: The above requirements also apply as a matter of rule to EGUs other than the affected boiler if the owner or operator of such other EGUs elects to participate in a NO<sub>x</sub> averaging demonstration.

- f. The applicable requirements of the Acid Rain Program for the affected boiler are addressed in Section 6.1.
- g. The applicable requirements of the Cross-State Air Pollution Rule for the affected boiler are addressed in Section 6.2.
- h. The applicable requirements of 35 IAC 225 Subpart B for the affected boiler are addressed in Section 6.4.
- i. The applicable requirement of the Mercury and Air Toxics Standards rule for the affected boiler are addressed in Section 6.5.

7.2.5 Non-Applicability Provisions

- a. i. This permit is issued based on the affected boiler not being subject to the NSPS D standards for firing of natural gas for SO<sub>2</sub> and NO<sub>x</sub>, when the boiler is considered to be using solid fuel (coal) as its principal fuel.
- ii. If the affected boiler is not using solid fuel (coal) as its principal fuel, the affected boiler shall comply with the requirements of the following NSPS standards that address burning a combination of fuels:
  - A. For SO<sub>2</sub>, 40 CFR 60.43(b).
  - B. For NO<sub>x</sub>, 40 CFR 60.44(b).
- b. Pursuant to Section 39.5(7) (a) of the Act:
  - i. The Permittee is shielded from the following rules for the affected boiler when the boiler is using solid fuel (coal) as its principal fuel. This is because incidental use of other fuels generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel.
    - A. 35 IAC 212.207.
    - B. 35 IAC 214.162.
  - ii. If the affected boiler is not using solid fuel (coal) as its principal fuel, the affected boiler shall comply with the requirements of the following conditions. During such periods, for PM, Condition 7.2.5(b) (ii) (A) shall substitute for Condition 7.2.4(c); and for SO<sub>2</sub>, Condition 7.2.5(b) (ii) (B) shall substitute for Condition 7.2.4(a).
    - A. The emissions of PM from the affected boiler in any one hour period shall not exceed the amount, in lbs/hr, allowed by the formula in 35 IAC 212.207.
    - B. The emissions of SO<sub>2</sub> from the affected boiler in any one hour period shall not exceed the amount, in lbs/hr, allowed by the formula in 35 IAC 214.162.
  - iii. For the purpose of the above conditions, the affected boiler shall be considered to be using solid fuel (coal) as its principal fuel if the use of natural gas is incidental to the use of coal, occurring for specific purposes associated with routine firing of solid fuel, such as startup, opacity reduction

emission mitigation, flame stabilization, outage of a coal pulverizer, or other temporary interruption in solid fuel supply. A boiler shall not be considered to be using solid fuel as its principal fuel if the use of natural gas is more than incidental to the firing of coal in the boiler or the use of coal is incidental to the operation of the boiler.

- iv. The Permittee shall notify the Illinois EPA if the status of the affected boiler changes to or from using solid fuel (coal) as its principal fuel. This notification shall be provided at least 7 days in advance of such change in status unless the change results from a sudden event that precludes such advance notification, in which case notification shall be provided as soon as practicable prior to the change.
  
- c. Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity monitoring because the Permittee must conduct opacity monitoring on the affected boiler in accordance with the NSPS.
  
- d. The affected boiler is not subject to 40 CFR Part 64, CAM, for SO<sub>2</sub> and NO<sub>x</sub> Acid Rain Requirements because CAM does not apply for Acid Rain Program requirements pursuant to 40 CFR 64.2(b)(1)(iii).
  
- e. The affected boiler is not subject to 40 CFR Part 64, CAM, for SO<sub>2</sub> and NO<sub>x</sub> pursuant to 40 CFR 64.2(b)(1)(vi) because this CAAPP permit specifies continuous emissions monitoring, continuous compliance determination methods, be used for applicable SO<sub>2</sub> and NO<sub>x</sub> emission standards.
  
- f. The affected boiler is not subject to 40 CFR Part 64, CAM, for the State standard for CO (Condition 7.2.4(d)) because the affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard.
  
- g. The affected boilers are not subject to 40 CFR Part 64, CAM, for HAPs, as limited by 40 CFR 63 Subpart UUUUUU and addressed in Section 6.5 pursuant to 40 CFR 64.2(b)(1)(i), because these NESHAP standards were proposed by the USEPA after November 15, 1990.
  
- h. The affected boiler is not subject to 40 CFR Part 64, CAM, for the state mercury emission standards (Condition 6.4.4(a)), because the mercury emissions of the affected boiler do not meet the applicability criteria in 40 CFR 64.2(a)(3) and, pursuant to 40 CFR 64.2(b)(1)(vi), this CAAPP permit specifies a continuous compliance determination method for this standard.
  
- i. The affected boiler is not subject to 35 IAC 214.121(a), because this rule was invalidated.

- j. The affected boiler is not subject to 40 CFR 60 Subpart CCCC, the NSPS for Commercial and Industrial Solid Waste Incineration Units because the affected boiler does not combust any solid waste as that term is defined in 40 CFR Part 241.
- k. The affected boiler is not subject to 40 CFR Subpart DDDDD, the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, or 40 CFR 63 Subpart JJJJJJ, the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources. This is because, pursuant to 40 CFR 63.7491(a) and 63.11195(k), an EGU covered by 40 CFR 63 Subpart UUUUU is not subject to 40 CFR 63 Subpart DDDDD or JJJJJJ.

7.2.6 Work Practices, Operational and Production Limits, and Emission Limitations

- a. Pursuant to Section 39.5(7) (d) of the Act, as part of its operation and maintenance of the affected boiler, the Permittee shall perform a combustion evaluation on the boiler at least semi-annually:
  - i. This evaluation shall consist of process measurements of the concentration of CO in the flue gas of the affected boiler as well as any adjustments and/or corrective measures undertaken for the combustion systems of the boilers.
  - ii. In a semi-annual period in which the Permittee conducts a tune-up of the EGU burner and combustion controls as specified in Condition 6.5.4(a), such tune-up will satisfy the semi-annual combustion evaluation requirement in Condition 7.2.6(a) (i) for that period.
- b. At all times, including periods of startup, shutdown and malfunction, the Permittee shall maintain and operate the affected boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required pursuant to the NSPS, 40 CFR 60.11(d).
- c. Natural gas shall be the only fuels fired in the auxiliary burners of the affected boiler [T1].

Note: Requirement of Construction Permit 15040039 issued April 24, 2015.

7.2.7 Testing Requirements

- a. Pursuant to Section 39.5(7) (d) (ii) of the Act, the Permittee shall have the PM and CO emissions of the affected boiler measured as specified below:
  - i. PM emission measurements shall be made within 90 days of operating the affected boiler for more than 72 hours total in a calendar quarter at a load\* that is

more than 15 percent higher than the greatest load on the boiler, during the most recent set of PM tests on the affected boiler in which compliance is shown (refer to Condition 7.2.7(e)), provided, however, that the Illinois EPA may upon request of the Permittee provide more time for testing (if such time is reasonably needed to schedule and perform testing or coordinate testing with seasonal conditions).

\* For this purpose, load shall be expressed in terms of either gross megawatt output or steam flow, consistent with the form of the records kept by the Permittee pursuant to Condition 7.2.9(a).

ii. Periodic PM emission measurements shall be made for the affected boiler within a time period determined from the compliance margin for the applicable PM emission standard, based on the results of the preceding PM measurement, as follows. For this purpose, the compliance margin is the extent to which the actual PM emissions as measured are lower than the applicable PM limit. For example, if the measured PM emissions of the affected boiler are 0.075 lb/mmBtu, the compliance margin for the applicable PM limit, 0.10 lb/mmBtu, would be 25 percent. ( $0.100 - 0.075 = 0.025$ ,  $0.025/0.100 = 0.25$  or 25 percent)

A. If the compliance margin is less than 20 percent, within 15 months of the previous measurement.

B. If the compliance margin is between 20 and 40 percent, within 27 months of the previous measurement.

C. If the compliance margin is greater than 40 percent, within 39 months of the previous measurement.

iii. Measurements of CO emissions shall be made as follows:

A. In conjunction with the initial measurements of PM emissions as required by Condition 7.2.7(a) (i) (unless this PM measurement is conducted prior to the issuance of this permit), if a measurement of CO emissions is not otherwise performed earlier in conjunction with a relative accuracy test audit (RATA) for SO<sub>2</sub> or NO<sub>x</sub> conducted under this permit.

B. In conjunction with each subsequent measurement of PM emissions made pursuant to Condition 7.2.7(a) (ii) or (iii) (or a RATA for SO<sub>2</sub> or NO<sub>x</sub> preceding such measurement), provided, however, that if measured CO emissions are no more than 100 ppm at 50 percent excess air, CO measurements

need not be performed with the next PM measurement (or preceding RATA) but shall be performed with the second measurement of PM emissions following the measurement in which CO emissions were no more than 100 ppm (or a RATA preceding that PM measurement).

- iv. A. If alternative fuel (i.e., any fuel other than coal and natural gas) is greater than 3.0 percent by weight of the fuel burned in a boiler during a calendar quarter, unless measurements for PM and CO emissions have already been conducted while burning alternative fuel at a percentage that is greater than or equal to the percent of those materials burned in that calendar quarter or at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated, the Permittee shall have measurements of PM and CO emissions from the boiler made during the next calendar quarter while firing alternative fuel is burned in the boiler.
- B. The Permittee shall conduct such measurements while firing the boiler at the lower of the following: (i) at least 1.25 times the percentage of alternative fuel material in the calendar quarter that triggered the testing; or (ii) at the maximum rate at which the systems that feed alternative fuel to the boiler will be operated. If the boiler has been burning a mix of alternative fuel materials, the mix of fuel during such measurements shall be approved by the Illinois EPA.
- C. The Permittee shall repeat such measurements if the percentage of alternative fuel materials burned in a boiler during a quarter is more than the percentage of such material being burned to the boiler when previous emission measurements were conducted.
- v. Measurements of PM and CO emissions shall be made within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.
- b. i. Measurements of PM and CO shall be performed at 90% or greater of the seasonal maximum operating loads of the affected boiler and other operating conditions that are representative of normal operation. In addition, the Permittee may perform measurements at other operating conditions to evaluate variation in emissions.
- ii. Measurements shall be taken at an appropriate location in the ductwork or stack associated with the affected boiler.

- iii. The following Reference Methods and procedures shall be used for these measurements. Refer to 40 CFR 60, Appendix A for USEPA Methods.

Location of Sample Points	Method 1
Gas Flow and Velocity	Method 2
Flue Gas Weight	Method 3
Moisture	Method 4
Particulate Matter (PM)	Methods 5
Carbon Monoxide (CO)	Method 10

Other test methods adopted by USEPA may be used in place of the above methods with the approval of the Illinois EPA

- c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to emission testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230.
- i. The Permittee shall submit this test plan at least 60 days prior to the actual date of testing and the test plan shall include the information specified by Condition 8.6.2.
- ii. Notwithstanding the above, as provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emission testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).
- d. The Permittee shall notify the Illinois EPA prior to conducting emission tests to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.
- e. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the tests results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:

- i. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
- ii. A description of any minor deviations from the test plan, as provided by 35 IAC 283.230(a).
- iii. Detailed description of operating conditions during testing, including:
  - A. Source(s) of fuel and specifications (ash, sulfur and heat content).
  - B. Boiler operating information, i.e., firing rate of the affected boiler(s) (mmBtu/hr), composition of fuel as burned (ash, sulfur and heat content), and fuel blending ratio (%), if a blend of fuels is burned.
  - C. Combustion system information, i.e., settings for distribution of primary and secondary combustion air, target level for O<sub>2</sub> in the flue gas, and levels of CO, CO<sub>2</sub> or O<sub>2</sub> in the flue gas, as determined by any diagnostic measurements.
  - D. Control equipment information, i.e., equipment condition and operating parameters during testing, including any use of the flue gas conditioning system.
  - E. Load during testing (gross megawatt output and steam flow).
  - F. Information on the usage of alternative fuel materials during testing, if testing was conducted to satisfy Condition 7.2.7(a)(iv).
- iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- v. The SO<sub>2</sub>, NO<sub>x</sub>, O<sub>2</sub> or CO<sub>2</sub>, (hourly averages) and opacity data (6-minute and hourly) measured during testing.

#### 7.2.8 Monitoring Requirements

- a. Pursuant to 40 CFR 60.45, 40 CFR 75.14 and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boiler.
  - i. This monitor shall be the primary basis for reporting of exceedances of Condition 7.2.4(b). (See Conditions 7.2.10-2(a) and 7.2.10-3(a).)

- ii. This monitor shall be the primary basis for reporting of exceedances of Condition 7.2.4(a)(iii), in accordance with 40 CFR 60.7(c) and 60.45(g). (See Conditions 7.2.10-2(a) and 7.2.10-3(a).)
- b. Pursuant to 40 CFR 60.45, 40 CFR 75.11, and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain a continuous emission monitoring system (CEMS) for the measurement of SO<sub>2</sub> emissions from the affected boiler.
  - i. This CEMS shall be used to demonstrate compliance with the limit in Condition 7.2.4(a) based on the average hourly SO<sub>2</sub> emission rate determined from monitored data from three-hour rolling averaging periods.

Note: This permit allows the use of an "Acid Rain Monitoring System", operated to comply with 40 CFR Part 75, in lieu of an "NSPS Monitoring System", as allowed by the monitoring provisions of the NSPS.

- c. Pursuant to 40 CFR 75.12, 35 IAC 217.710(a), and Section 39.5(7)(d)(iii) of the Act, the Permittee, shall install, calibrate, maintain and operate a CEMS for the measurement of NO<sub>x</sub> emissions from the affected boiler, in accordance with the requirements of 40 CFR 75 Subpart B.

Note: Pursuant to 40 CFR 60.45(b)(3), NO<sub>x</sub> continuous emission monitoring is not required to be conducted for the affected boiler under the NSPS because initial emission testing demonstrated NO<sub>x</sub> emissions to be less than 0.49 lb/mmBtu, which was less than 70 percent of the applicable standard.

- d. Pursuant to Section 412 of the Clean Air Act and 40 CFR Part 75, the source is required to operate continuous monitors for the affected boiler for various parameters, including SO<sub>2</sub>, NO<sub>x</sub>, volumetric flow and opacity, along with a computerized data acquisition and handling system for collected data. (See also Condition 6.1.3) To the extent that applicable performance specifications and operating requirements for monitoring under 40 CFR Part 75 are inconsistent with the above requirements for monitoring, the procedures of 40 CFR Part 75 shall take precedence. (See also Condition 8.2)
- e. Compliance Assurance Monitoring (CAM) Requirements

The affected boiler is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The Permittee shall comply with the monitoring requirements of the CAM Plan described in 10.4 - Attachment 4 (Table 4.1), pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment [40 CFR 64.7(a) and (b)].

i. Continued Operation [40 CFR 64.7(c)]

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

ii. Response to Excursions or Exceedances [40 CFR 64.7(d)]

- A. Upon detecting an excursion or exceedance, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- B. Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device.

7.2.9 Recordkeeping Requirements

a. Operational Records for the Boiler

Pursuant to 40 CFR 60.7 and Sections 39.5(7) (a) and (e) of the Act, the Permittee shall maintain the following operational records for the affected boiler:

- i. Operating records that include:
  - A. The occurrence and duration of each startup, shutdown or malfunction of the boiler and any malfunction of the air pollution control equipment (See also Conditions 7.2.9(b), (f) and (g).) [40 CFR 60.7(b)].
  - B. Information documenting the performance of the combustion evaluation required by Condition 7.2.6(a), including the date of the evaluation, the concentrations of CO measured at the start and conclusion of the evaluation, and a description of adjustments and preventative and corrective measures undertaken for the combustion systems of the boiler.
- ii.
  - A. Load, in terms of either gross megawatts output or steam flow, on an hourly basis.
  - B. If the Permittee is relying on data for heat input for purposes of compliance with Conditions 7.2.4(a) (ii), 7.2.4(c) or 7.2.4(d) that is different from that recorded pursuant to the federal Acid Rain Program, records of heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load as recorded above to hourly heat input.
  - C. Records for the total amount of natural gas burned by the auxiliary burners.
- iii. Records for each day when an alternative fuel (i.e., a fuel material other than coal or natural gas) was burned, including the estimated amount of each such material burned.
- iv. Total operating hours (hours/quarter).
- v.
  - A. Amount of coal consumed (tons/quarter).
  - B. Amount of each other fuel material consumed (tons, gallons or cubic feet per quarter, as appropriate).
- vi.
  - A. Records of agreements with suppliers of alternative fuel(s), including origin of material, specifications for heat and ash

content, and representative data for elemental composition of such material, including mercury and other heavy metals, chlorine and fluorine.

- B. Records for each load of such material received at the source, which at a minimum shall include date, supplier name, type of material and amount (tons).

b. Records for Control Equipment

Pursuant to Sections 39.5(7) (a) and (e) of the Act, the Permittee shall maintain the following operating records for the air pollution control equipment on the affected boiler:

i. Maintenance and Repair Records

A maintenance and repair record for each control device, which shall list the activities performed, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

ii. Selective Catalytic Reduction (SCR) System

A. Manufacture/vendor or Permittee developed operating and maintenance procedures.

B. Operating records for the system, including reagent usage and system settings.

Note: These records need only be maintained during periods when the Permittee operates this system, which is operated at its discretion as needed to comply with applicable requirements.

C. The maintenance and repair records for the SCR system shall also address activities related to the SCR catalyst, including addition or replacement of catalyst.

iii. Electrostatic Precipitator (ESP)

When the affected boiler is in operation:

A. The status of each ESP field shall be recorded at least once per shift.

B. The following numerical data shall be recorded at least once per day: (1) Primary voltages and currents; (2) Secondary voltages and currents; and (3) Sparking rates.

iv. FGD Scrubber System

A. Manufacture/vendor or Permittee developed operating and maintenance procedures.

- B. Operating records, including system settings and daily usage of limestone or scrubbant.

c. Records for Continuous Opacity Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act, and the NSPS, 40 CFR 60.45, the Permittee shall maintain records for the opacity monitoring system on the affected boiler required by Condition 7.2.8(a) that as a minimum shall include the following:

- i. Operating records for each opacity monitoring system, including:
  - A. Opacity measurements.
  - B. Continuous monitoring system performance testing measurements.
  - C. Performance evaluations and other quality assurance/control activities.
  - D. Calibration checks.
  - E. Maintenance and adjustment performed.
  - F. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason.
  - G. Quarterly reports submitted in accordance with NSPS, 40 CFR 60.7(c) and Condition 7.2.10-2(a) and (d).
- ii. Records to address compliance with Conditions 7.2.4(a)(ii), (a)(iii), (b) and (c), including:
  - A. Each 6-minute period when the opacity was above the limitation of Conditions 7.2.4(a)(iii) and 7.2.4(b) (20 percent opacity) with date, time, whether it occurred during startup, malfunction (malfunction/breakdown), or shutdown, and further explanation of the incident.

d. Records for Continuous SO<sub>2</sub> Monitoring Systems

Pursuant to 40 CFR 60.45, 40 CFR 75.50, and Section 39.5(7)(e) of the Act the Permittee shall maintain records for the SO<sub>2</sub> CEMS on the affected boiler required by Condition 7.2.8(b) that as a minimum shall include the following:

- i. Operating records for the SO<sub>2</sub> CEMS, including:
  - A. SO<sub>2</sub> emission data into units of the applicable standards (lbs/mmBtu) calculated in accordance with NSPS, 40 CFR 60.45(e).

- B. Continuous monitoring system performance testing measurements.
  - C. Performance evaluations and other quality assurance/control activities.
  - D. Calibration checks.
  - E. Maintenance and adjustments performed.
  - F. Periods when the SO<sub>2</sub> CEMS was inoperative, with date, time and reason.
  - G. Data reduction information.
  - H. Quarterly reports submitted in accordance with NSPS, 40 CFR 60.7(c) and Condition 7.2.10-2(a) and (b).
- ii. Records to verify compliance with the limitation of Condition 7.2.4(a) (ii), including:
- A. SO<sub>2</sub> emissions in the terms of the applicable standard (lbs/mmBtu) from the affected boiler on an hourly basis, as derived from the data obtained by the SO<sub>2</sub> CEMS.
  - B. The date and time of any three-hour rolling averaging period when the total SO<sub>2</sub> emission rate, as recorded above, exceeded 1.2 lbs/mmBtu as allowed by Condition 7.2.4(a) (ii), with the calculated SO<sub>2</sub> emission rate.
- iii. Records of the SO<sub>2</sub> emissions of the affected boiler in lbs/hr, including the maximum emissions of the boiler during the quarter and emissions for other hours during the quarter, as needed to verify compliance with the limit of Condition 7.1.4(c), which applies to all coal-fired boilers at the source. These records shall be prepared from the above records at least quarterly.
- e. Records for Continuous NO<sub>x</sub> Monitoring
- Pursuant to 40 CFR 75.50, 35 IAC 217.712(a), and Section 39.5(7) (e) of the Act, the Permittee shall maintain records for the NO<sub>x</sub> CEMS on the affected boiler required by Condition 7.2.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, that as a minimum shall include the following:
- i. Operating records for the NO<sub>x</sub> CEMS, including:
    - A. NO<sub>x</sub> emission data into units of the applicable standards (lbs/mmBtu) calculated in accordance with NSPS, 40 CFR 60.45(e).

- B. Continuous monitoring system performance testing measurements.
  - C. Performance evaluations and other quality assurance/control activities.
  - D. Calibration checks.
  - E. Maintenance and adjustments performed.
  - F. Periods when the CEMS was inoperative, with date, time and reason.
  - G. Data reduction information.
  - H. Quarterly reports submitted in accordance with Condition 7.2.10-2(a) and (c).
- ii. Records to verify compliance with the limitation of Condition 7.2.4(a) (ii), including:
    - A. NO<sub>x</sub> emissions in the terms of the applicable standard (lbs/mmBtu) from the affected boiler on an hourly basis, as derived from the data obtained by the NO<sub>x</sub> CEMS.
    - B. The date and time of any three-hour rolling averaging period when the total NO<sub>x</sub> emission rate, as recorded above, exceeded 0.7 lb/mmBtu as allowed by Condition 7.2.4(a) (ii), with the calculated NO<sub>x</sub> emission rate. These records shall be prepared from the above records at least quarterly as needed to verify compliance with the limitation of Condition 7.2.4(a) (ii).
- f. Records for Startups of Affected Boilers, pursuant to Section 39.5(7) (b) of the Act
    - i. The Permittee shall maintain written startup procedures for the affected boiler, as required by Condition 7.2.3(b) (ii).
    - ii. The Permittee shall maintain the following records related to startups of the affected boiler:
      - A. For all startups on the affected boiler.
        - I. Date, time and duration of the startup.
        - II. A description of the startup and reason(s) for the startup with additional documentation showing that written startup procedures were followed including any deviations from established procedures and the reason the procedure could not be followed.

- B. For each startup of the affected boiler where an exceedance from a relevant standard did or may have occurred during startup, maintain the following additional records for such startups.
  - I. Identification of the applicable standard(s) that were or may have been exceeded.
  - II. An explanation of the nature of such exceedance(s), including the magnitude of such excess emissions.
  - III. A description of the actions taken or to be taken to minimize the magnitude and duration of excess emissions.
  - IV. An explanation whether similar incidents could be prevented or ameliorated in the future and if so, a description of the actions taken or to be taken to prevent similar incidents in the future.
  
- C. For each startup when an exceedance of a relevant standard occurred or the duration of startup from initial firing of fuel to stable operation of the generating unit at load exceeded 18 hours maintain the following additional records for such startups.
  - I. A description of the events that led up to the extended startup duration.
  - II. The reason(s) for the extended startup duration.
  - III. An explanation of the consequences of the prolonged startup as it relates to the magnitude of emissions, including:
    - 1. The actions taken to minimize emissions and the duration of the startup, and
    - 2. An explanation whether similar incidents might be prevented in the future and if so, the corrective actions taken or to be taken to prevent similar incidents.
  
- g. Records for Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown of the affected boiler:

- i. Maintenance and repair record(s) for the affected boiler that, at a minimum, address aspects or

components of the boiler for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, with date, description and reason for the activity. In addition, in the maintenance and repair record(s) for control equipment required by Condition 7.2.9(b)(i), the Permittee shall also list the reason for the activities that are performed.

- ii. Records for each incident when operation of the affected boiler continued with excess opacity or emissions, including malfunction or breakdown as addressed by Condition 7.2.3(c), that, at a minimum, include the following information:
  - A. Date, time, duration and description of the incident.
  - B. The corrective actions used to reduce the quantity of emissions and the duration of the incident.
  - C. Confirmation of fulfillment of the requirements of Condition 7.2.10-3(a), as applicable, including copies of follow-up reports submitted pursuant to Condition 7.2.10-3(a)(ii).
  - D. If opacity exceeded the applicable standard for two or more hours or emissions exceeded or may have exceeded an applicable hourly standard, as listed in Condition 7.2.4, during the incident:
    - I. A detailed explanation why continued operation of the affected boiler was necessary.
    - II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boiler and associated equipment and any changes to operating and maintenance procedures.
    - III. An estimate on a qualitative or, if available, quantitative basis of whether emissions of PM and CO during the incident exceeded or may have exceeded any applicable hourly standard.

h. Acid Rain Program

Records for the continuous emission monitoring required for the affected boiler by the Acid Rain Program should be kept by the source in accordance with 40 CFR Part 75, including the General Recordkeeping Provisions; the General Recordkeeping Provisions for Specific Situations, if applicable; and Certification, Quality Assurance and Quality Control Record Provisions [See Condition 6.1.3].

i. Records for Compliance Assurance Monitoring (CAM) Requirements

The Permittee shall maintain records of the monitoring data, monitor performance data, corrective actions taken, monitoring equipment maintenance, and other supporting information related to the monitoring requirements in Condition 7.2.8(e) as required by 40 CFR 64.9(b)(1).

7.2.10-1 Reporting Requirements - Reporting of Deviations

a. Prompt Reporting of Deviations

For the affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. At a minimum, these notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the possible cause of such deviations, any corrective actions and any preventative measures taken [Section 39.5(7)(f)(ii) of the Act].

- i. Notification and reporting as specified in Condition 7.2.10-3(a) for certain deviations from the PM limit in Condition 7.2.4(a)(ii) and (c).
- ii. Notification and reporting as specified in Condition 7.2.10-3(a) for certain deviations from the opacity limit in Condition 7.2.4(a)(iii) and (b).
- iii. Notification with the reports required by Conditions 7.2.10-2(b), (c), (d) and (e) for deviations from the limits in Condition 7.2.4(a), (b), (c), (d) and (e) and from the requirements of Condition 7.2.8 for emissions monitoring.
- iv. Notification with the quarterly reports required by Condition 7.2.10-2(a) for deviations not addressed above by Condition 7.2.10-1(a)(i), (ii) or (iii), including deviations from other applicable requirements, e.g., the applicable CO emission standard, work practice requirements, and recordkeeping requirements.

b. Periodic Reporting of Deviations

The quarterly reports required by Condition 7.2.10-2(a) shall include the following information for the affected boiler related to deviations from permit requirements during the quarter [Sections 39.5(7)(a) and (f)(i) of the Act].

- i. A listing of all instances of deviations that have been reported in writing to the Illinois EPA as provided by Condition 7.2.10-1(a)(i) and (ii), including identification of each such written notification or report. For this purpose, the Permittee need not resubmit copies of these previous

notifications or reports but may elect to supplement such material.

- ii. Detailed information, as required by Condition 7.2.10-1(a)(iii) or (iv), for all other deviations not addressed in the above listing.

#### 7.2.10-2 Reporting Requirements - Periodic Reporting

##### a. Quarterly Reports

In place of the semi-annual monitoring reports otherwise required by Condition 8.6.1, the Permittee shall submit quarterly reports to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act.

- i. These reports shall include the following information for operation of the affected boiler during the quarter:
  - A. The total operating hours for the affected boiler, as also reported in accordance with 40 CFR Part 75.
  - B. The greatest load achieved by the affected boiler (steam flow or gross megawatts), and total number of hours in which the affected boiler exceeded a load that was more than 15 percent higher than the greatest load in Megawatt on the boiler during the most recent set of PM tests required by Condition 7.2.7(a)(i).
  - C. A discussion of significant changes in the fuel supply to the affected boiler, if any, including changes in the source of coal, the introduction of new fuel materials other than coal and natural gas, and changes in the source of such other fuel materials or the maximum rate at which they will be fired.
  - D. A list of the startups of the affected boiler, including the date, duration and description of each startup. When any startup resulted in an exceedance, a copy of the records required in Conditions 7.2.9(g)(ii)(B) and(C), shall be included in this report when such records were required.
  - E. A copy of the records required by Condition 7.2.9(c)(ii) identifying the date and time that the opacity was exceeded, with operating condition if startup, malfunction, breakdown, or shutdown; with further explanation of the incident and whether particulate matter emissions may have exceeded the PM limit.
- ii. These reports shall include the information for SO<sub>2</sub>, NO<sub>x</sub>, and PM emissions and opacity from the affected

boiler during the quarter and the operation of required continuous monitoring systems specified by Conditions 7.2.10-2(b), (c) and (d).

- iii. These reports shall be submitted after the end of every calendar quarter as follows:

Monitoring Period	Submittal Deadline
January - March	April 30
April - June	July 30
July - September	October 30
October - December	January 30

b. Reporting of SO<sub>2</sub> Emissions

Pursuant to Sections 39.5(7)(e) of the Act and the NSPS 40 CFR 60.45(g), the Permittee shall report the following information to the Illinois EPA in accordance with 40 CFR 60.7(c) for the affected boiler with its quarterly reports pursuant to Condition 7.2.10-2(a):

- i. Summary information on the performance of SO<sub>2</sub> CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the SO<sub>2</sub> CEMS was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.
- ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boiler, the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was out-of-control as addressed by 40 CFR 75.24.
- iii. The following information for each period when SO<sub>2</sub> emissions were in excess of the applicable standards specified in Condition 7.2.4(a)(ii). When there were no such exceedances, this shall be stated in the report.
- A. The starting date and time of the SO<sub>2</sub> excess emissions.
  - B. The duration of the excess emissions.
  - C. A copy of the records for the excess emissions, as maintained pursuant to Condition 7.2.9(d)(ii), including the measured emission rate.
  - D. A detailed explanation of the cause of the excess emissions.

- E. A detailed explanation of corrective actions and actions taken to lessen the emissions.

c. Reporting of NO<sub>x</sub> Emissions

Pursuant to Sections 39.5(7) (a) and (f) of the Act and the NSPS 40 CFR 60.45(g), the Permittee shall report the following information for the affected boiler to the Illinois EPA in accordance with 40 CFR 60.7(c) with its quarterly reports pursuant to Condition 7.2.10-2(a):

- i. Summary information on the performance of the NO<sub>x</sub> CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the NO<sub>x</sub> CEMS was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.
- ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boiler: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was "out-of-control" as addressed by 40 CFR 75.24.
- iii. The following information for each period when NO<sub>x</sub> emissions were in excess of the limitation in Condition 7.2.4(a) (ii). When there were no such exceedances, this shall be stated in the report:
  - A. The starting date and time of the NO<sub>x</sub> excess emissions.
  - B. The duration of the excess emissions.
  - C. A copy of the records for the excess emissions, as maintained pursuant to Condition 7.2.9(e) (ii), including the measured emission rate.
  - D. A detailed explanation of the cause of the excess emissions.
  - E. A detailed explanation of corrective actions and actions taken to lessen the emissions.

d. Reporting Related to Opacity and PM Emissions

Pursuant to Sections 39.5(7) (b) and (f) of the Act and the NSPS, 40 CFR 60.45(g), the Permittee shall report the

following information for the affected boiler to the Illinois EPA with its quarterly reports pursuant to Condition 7.2.10-2(a):

- i. Information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" in accordance with 40 CFR 60.7(d). Additionally, the quarterly report shall also include:
  - A. The total operating time of the affected boiler; and
  - B. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative except for zero and span checks.
- ii. When no excess opacity occurred or the continuous opacity monitoring system has not been inoperative, repaired or adjusted such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
- iii. The following information for each period when opacity was in excess of the applicable standards specified in Conditions 7.2.4(a)(iii) and (b), for any six-minute period during which the average opacity of emissions exceeds 20 percent opacity.
  - A. The starting dates and time of the exceedance.
  - B. The duration of the excess opacity.
  - C. The magnitude of excess opacity, based on six minute average opacity, including:
    - I. The percent opacity for each six-minute period.
    - II. The start and stop time of each six minute period in excess of the limitation.
  - D. The cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of the boiler.
  - E. Any corrective actions taken.
  - F. Identification of any previous report for the incident submitted to the Illinois EPA pursuant to Condition 7.2.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
  - G. Information required by Condition 7.2.9(g)(ii)(A), (B) and (D)(I) for incidents when operation of the affected boiler continued

during malfunction or breakdown with excess emissions that are not addressed by individual reports submitted pursuant to Condition 7.2.10-3(a)(ii).

Note: While the NSPS provides that one six-minute period per hour during which the average opacity of emissions exceeds 20 percent opacity, but not more than 27 percent opacity need not be reported (40 CFR 60.45(g)(1)), such a provisions does not accompany 35 IAC 212.122.

- iv. The following information for periods when PM emissions were in excess of the limitation in Conditions 7.2.4(a)(ii) and 7.2.4(c). If there were no such exceedances during the reporting period, the quarterly report shall so state.
  - A. A summary of information for each period of exceedance that includes:
    - I. The starting date and time of the exceedance.
    - II. The duration of the exceedance.
    - III. The magnitude of the exceedance.
    - IV. The percent opacity measured for each six-minute period during the exceedance.
    - V. The means by which the exceedance was indicated or identified, in addition to the level of opacity.
    - VI. The cause of the exceedance, including whether the exceedance occurred during startup, malfunction or breakdown.
    - VII. Corrective actions and actions taken to lessen the emissions.
  - B. Identification of the previous reports for the incidents submitted to the Illinois EPA pursuant to Condition 7.2.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
- v. The following summary information related to opacity and PM exceedances:
  - A. Further information for each type of recurring opacity exceedance that occurred during the quarter, including: a discussion of any circumstances or events during the quarter that generally affected the number or magnitude of such exceedances; a discussion of any additional understanding of the causes for such exceedances

gained during the quarter, including the role of component failure or degradation, maintenance practices, and operating procedures; a general discussion of the effectiveness of the corrective actions that were taken in response to such exceedances; and a general discussion of further actions that are being considered to address such exceedances.

- B. Further information for any new type(s) of opacity exceedances that occurred during the quarter including: a general narrative description for the type(s) of exceedance; a general explanation of the cause(s) for such exceedances, including the role of component failure or degradation, maintenance practices, and operating procedures; a detailed explanation of the corrective actions that have been taken for such exceedances, including the reasons that the selected actions were taken, the effectiveness of those actions, and the likelihood of future occurrence of similar exceedances; and a general discussion of possible further actions that could be taken to address such exceedances. For this purpose, new type(s) of exceedance are ones that have not been addressed in the preceding four quarterly opacity reports.
- C. Other information relevant to generally explaining the number and magnitude of opacity and PM exceedances during the quarter, e.g., a further discussion of specific events or circumstances that occurred that affected the number or magnitude of exceedances during the quarter.
- D. Information describing actions taken during the quarter that should generally act to significantly reduce the number or magnitude of future opacity or PM exceedances, e.g., a summary of relevant upgrades or replacements of components that were completed, with a description of such actions, an explanation of their relationship to exceedances, and a discussion of their anticipated effect on future exceedances.

vi. A glossary of common technical terms used by the Permittee in its reports pursuant to this Condition 7.2.10-2(d), including the definitions for the categories used by the Permittee to classify exceedance events.

e. Reporting of NO<sub>x</sub> Emissions for the Ozone Control Period

The Permittee shall submit a report to the Illinois EPA by November 30 of each year that demonstrates whether the

affected boiler has complied with Condition 7.2.4(e), pursuant to 35 IAC 217.712(d) and (e).

- i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.2.4(e) (i) (A), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and NO<sub>x</sub> emissions of the unit for the ozone control period.
- ii. If the Permittee is demonstrating compliance by means of "NO<sub>x</sub> averaging" as authorized by Condition 7.2.4(e) (ii) (B), this report shall contain the information specified by 35 IAC 217.712(e) and other related information as follows:
  - A. In all cases, for the affected boiler or unit covered by this permit that is participating in the NO<sub>x</sub> averaging demonstration, the Permittee shall report the following:
    - I. Identification of the other EGU that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.2.10-2(e) (ii) (B) below.
    - II. A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).
    - III. The average NO<sub>x</sub> emission rate for the unit, with calculations and supporting information, as required by 35 IAC 217.712(e) (2) and (3), including the heat input and NO<sub>x</sub> emissions of the unit for the ozone control period.
    - IV. A statement whether the unit would show compliance on its own in the absence of averaging.
  - B. If the Permittee is the lead party for a NO<sub>x</sub> averaging demonstration, the Permittee shall report the following:
    - I. Copies of the information submitted by other parties for the EGU participating in the demonstration, which include all material required by Condition 7.2.10-2(e) (ii) (A) above (unless or except as this information is provided with the submittal by a person

who is a responsible official for the EGU participating in the demonstration).

II. The averaged NO<sub>x</sub> emission rate for all EGU participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e) (1).

III. A statement whether the demonstration shows compliance.

- f. Submittal of Supplemental Information Related to NO<sub>x</sub> Emissions during the Ozone Control Period

The Permittee shall submit copies of any records and data required by 35 IAC 217.712 to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA [35 IAC 217.712(g)].

- g. Acid Rain Program Reporting

Pursuant to Sections 412 of the Clean Air Act and 40 CFR Part 75, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application; Quarterly Reports; and Opacity Reports [See Condition 6.1.3].

- h. Reporting of Compliance Assurance Monitoring (CAM)

The Permittee shall submit monitoring reports to the Illinois EPA in accordance with Condition 8.6.1 and shall include, at a minimum, the information required under Condition 8.6.1 and the following information:

- i. Summary information on the number, duration, and cause of excursions or exceedances, and the corrective actions taken [40 CFR 64.6(c) (3) and 64.9(a) (2) (i)]; and
- ii. Summary information on the number, duration, and cause for monitoring equipment downtime incidents, other than downtime associated with calibration checks [40 CFR 64.6(c) (3) and 64.9(a) (2) (ii)].

#### 7.2.10-3 Reporting Requirement - Notifications

- a. Reporting of Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA, Compliance Section and Regional Office, concerning incidents when operation of the affected boiler, or associated support system, continued with excess emissions, including continued operation during malfunction or breakdown as addressed by Condition 7.2.3(c). These requirements do not apply to such

excess emissions, if any, that occur during startup or shutdown of the affected boiler.

i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity exceeds 30 percent for eight or more 6-minute averaging periods unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during an incident only exceeds 20 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.2.10-1(b) and 7.2.10-2(d).)

ii. Upon conclusion of each incident in which the applicable PM emission standard may have been exceeded or in which exceedances of the opacity standard was two hours or more in duration, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days that includes: a detailed description of the incident and its cause(s); an explanation why continued operation of the affected boiler was necessary; the length of time during which operation continued under such conditions, until repairs were completed or the boiler was taken out of service; a description of the measures taken to minimize and correct deficiencies with chronology; and a description of the preventative measures that have been and are being taken.

b. Startups that resulted in excess emissions shall be addressed in the reports as required by Condition 7.2.10-2(a) accompanied by the records required in Condition 7.2.9(f) (ii) (B).

#### 7.2.11 Anticipated Operating Scenarios/Operating Flexibility

The Permittee is authorized to make the following operational changes with respect to the affected boiler without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7) (a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC 201.102 or 40 CFR 52.21(a) (2); and to comply with other legal requirements that apply to such a change:

- a. Operation of additional air pollution control equipment, which is addressed by a separate construction permit.
- b. Firing of coal or a mix of coal from different suppliers.
- c. Firing of the following materials in conjunction with firing of standard fuels, provided that such materials can be accommodated with the existing fuel handling system and the

burners in the affected boiler, and that such materials do not make up more than 10 percent by weight of the fuel supply to the boiler on a quarterly basis:

- i. Used oil and boiler cleaning residue generated at the source.
- ii. Alternative fuels that do not constitute waste and were not generated from municipal waste or hazardous waste, provided that such fuels are shipped to the source in homogeneous form prepared for use as fuel (e.g., a shipment of tire derived fuel). Such alternative fuels include materials such as petroleum coke, tire derived fuel (as defined at Section 54.10b of the Act), clean lumber, shredded polyethylene agricultural containers, and seed corn.

Note: Other requirements unrelated to air pollution control may apply to firing of alternative fuels, such as Standards for Management of Used Oil, 35 IAC Part 739.

#### 7.2.12 Compliance Procedures

- a. i. Compliance with the opacity limits of Conditions 7.2.4(a)(iii) and 7.2.4(b) (20 percent opacity) is addressed by the average opacity calculated from 6-minute periods of opacity measurements from the continuous opacity monitoring system operated in accordance with the requirements of Condition 7.2.8(a) and the recordkeeping requirements of Conditions 7.2.9.
- ii. Notwithstanding Condition 7.2.12(a)(i) above, should the Permittee choose to rely on 35 IAC 212.122(b) to allow opacity greater than 20 percent (6-minute average) from the affected boiler, the Permittee shall do the following:
  - A. Maintain records for the affected boiler of short-term opacity data, that is, either a record of discrete measurements of opacity taken no more than 15 seconds apart or a record of 1-minute average opacity data determined from four or more data points equally spaced during each minute period, to determine whether opacity from the boiler exceeded 20 percent opacity.
  - B. Have the capability to review such short-term opacity data for the affected boiler to identify:
    - I. Any hour in which opacity exceeded 20 percent, and then, for such hour, record the duration of opacity in excess of 20 percent; whether opacity ever exceeded 40 percent; and whether the duration of opacity in excess of 20 percent was more than 3 minutes in aggregate.

- II. For the affected boiler, whether opacity in excess of 20 percent occurred in more than three hours in a 24 hour period.
- C. In the reports required by Condition 7.2.10-2(d), confirm that the relevant short-term opacity data, reviewed as above, shows that the terms of 35 IAC 212.122(b) are satisfied, when 35 IAC 212.122(b) is relied upon as the basis to claim that the affected boiler did not violate Conditions 7.2.4(a)(iii) and (b) even though opacity on a 6-minute average exceeded 20 percent.
- D. Notify the Illinois EPA at least 15 days prior to changing its procedures associated with reliance on 35 IAC 212.122(b), to allow the Illinois EPA to review the new recordkeeping and data handling practices planned by the Permittee.
- b. Compliance with PM emission limits of Conditions 7.2.4(a)(ii) and 7.2.4(c) is addressed by emissions testing and continuous opacity monitoring in accordance with Conditions 7.2.7 and 7.2.8(a), respectively, and the recordkeeping required by Conditions 7.2.9.
- c. Compliance with the SO<sub>2</sub> emission limits of Condition 7.2.4(a)(ii) is addressed by continuous monitoring in accordance with Condition 7.2.8(b) and the recordkeeping required by Condition 7.2.9(d).
- d. Compliance with the CO emission limit of Condition 7.2.4(d) is addressed by the required work practices in Condition 7.2.6(a), emission testing in accordance with Conditions 7.2.7 and the recordkeeping required by Condition 7.2.9.
- e. Compliance with NO<sub>x</sub> emission limits of Conditions 7.2.4(a)(ii) and (e) is addressed by the monitoring in accordance with Condition 7.2.8(c) and the recordkeeping required by Condition 7.2.9(e).
- f. Compliance with the work practices required by Condition 7.2.6(a) is addressed by the recordkeeping required by Condition 7.2.9.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.3 Pulverized Coal Fired Boiler - Dallman Boiler 4

7.3.1 Description

The affected unit for the purpose of these specific permit conditions is Dallman Boiler 4 with associated pollution control train. The boiler would also have the capability to burn natural gas, which would be used for startup of the boiler. This boiler as a nominal heat input capacity of 2100 mmBtu/hr. This boiler was constructed pursuant to Construction Permit/PSD Approval 04110050, which addressed this project as a major modification for purposes of PSD for emissions of CO, PM (filterable and condensable particulate) and sulfuric acid mist

Note: The description in Condition 7.3.1.is for informational purposes only and implies no limits or constraints

7.3.2-1 List of Emission Units and Air Pollution Control Equipment

The "affected boiler" or the "affected source" or "EGU" for the purpose of these unit-specific conditions, is the boiler identified below, as generally described in Conditions 7.3.1.

Unit I.D.	Description	Emission Control Equipment
Dallman Boiler 4	Babcock and Wilcox Boiler	Low-NO <sub>x</sub> Combustion Technology, SCR, Baghouse, Wet FGD and Wet ESP

7.3.2-2 Terminology for Particulate

For purposes of the limits for emissions of particulate in Conditions 7.3.3-1(b) (i) (A) and (B) and 7.3.6(b) and (c), all particulate measured by USEPA Method 5 shall be considered "PM" or "filterable PM" unless particulate emissions are measured by Reference Methods 201 or 201A. These limits do not address condensable particulate. Limits for total PM shall address both filterable particulate and condensable particulate. [T1]

7.3.3-1 Best Available Control technology (BACT) Requirements

- a. The affected boiler shall be operated and maintained with the following features to control emissions: [T1][BACT]
  - i. Good combustion practices.
  - ii. Low-NO<sub>x</sub> burners.
  - iii. Selective catalytic reduction (SCR).
  - iv. Fabric Filter or "baghouse".
  - v. Wet flue gas desulfurization or "scrubber".
  - vi. Wet electrostatic precipitator (WESP).
- b. The emissions from the affected boiler shall not exceed the following limits [T1] [BACT]:

- i. A. PM - 0.012 lb/mmBtu (filterable).  

This limit shall not apply during startup, shutdown and malfunction as addressed by Conditions 7.3.3-1(c).
  - B. PM Total - 0.018 lb/mmBtu (filterable and condensable).  

This limit shall not apply during startup, shutdown and malfunction as addressed by Conditions 7.3.3-1(c).
  - C. CO - 0.120 lb/mmBtu.  

This limit shall not apply during startup, shutdown and malfunction as addressed by Conditions 7.3.3-1(c).
  - D. Sulfuric Acid Mist - 0.0050 lb/mmBtu.  

This limit shall not apply during startup, shutdown and malfunction as addressed by Conditions 7.3.3-1(c).
  - ii. For PM, PM total, CO and sulfuric acid mist, for which the limits in Condition 7.3.3-1(b) do not apply during startup, shutdown and malfunction, the applicable short-term numerical limits set by Condition 7.3.6(b), which address emissions in pounds/hour and which apply at all times, also serve as "secondary" numerical limits for purposes of BACT to address periods of startup, shutdown and malfunction, with compliance determined based on engineering analysis and calculations.
- c. The Permittee shall use good air pollution control practices to minimize emissions during startup, shutdown and malfunction of the affected boiler as further addressed in Condition 7.3.5(a), including the following [T1] [BACT]:
    - i. Use of natural gas during startup to heat the boiler prior to initiating firing of coal;
    - ii. Operation of the boiler and associated air pollution control equipment in accordance with written operating procedures that include Startup, Shutdown and Malfunction Plan(s) (See also Condition 2.1.6(a.)); and
    - iii. Inspection, maintenance and repair of the affected boiler and associated air pollution equipment in accordance with written maintenance procedures.

7.3.3-2 Applicable Federal Emission Standards

- a. The affected boiler is an "affected facility" subject to a New Source Performance Standard (NSPS) for Electric Utility

Steam Generating Units, 40 CFR 60 Subpart Da, and related requirements in 40 CFR 60 Subpart A, General Provisions.

- i. The emissions and opacity from the affected boiler shall not exceed the applicable limits pursuant to the NSPS Da. In particular, as an affected facility that commenced construction after February 28, 2005 but before May 4, 2011, the emissions of the affected boiler shall not exceed the following limits applicable to firing of solid fuel:
  - A. PM (as measured by Reference Method 5) - 0.015 lb/mmBtu heat input, pursuant to 40 CFR 60.42Da(c). (Compliance with the PM emission limit constitutes compliance with the percent reduction requirements, pursuant to 40 CFR 60.42Da(d).)
  - B. Opacity - 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity, pursuant to 40 CFR 60.42Da(b).
  - C. SO<sub>2</sub> - Either 5 percent of the potential combustion concentration (95 percent reduction) 30 day rolling average basis or 1.4 lbs/MWh, pursuant to 40 CFR 60.43Da(i).
  - D. NO<sub>x</sub> - 1.0 lb/MWh gross energy output, 30-day rolling average basis, pursuant to 40 CFR 60.44Da(e).
- ii. Pursuant to 40 CFR 60.48Da(a), the above emission limits for opacity, PM, NO<sub>x</sub> and SO<sub>2</sub> apply at all times, except during periods of startup, shutdown or malfunction as defined by 40 CFR 60.2. Notwithstanding this provision, exceedances of these limits during startup, malfunction, and shutdown are still subject to recordkeeping and reporting requirements under the NSPS.

Note: In response to an action to enforce the standards set forth in 40 CFR 60.42Da, 60.43Da, and 60.44Da, as addressed above, 40 CFR 60.48Da(s) provides that the Permittee may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by malfunction, as defined at 40 CFR 60.2, as further provided by 40 CFR 60.48Da(s).
- iii. Pursuant to the NSPS, 40 CFR 60.11(d), at all times, including startup, shutdown and malfunction, the Permittee shall maintain and operate the affected boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
- b. The applicable requirements of the Acid Rain Program for the affected boiler are addressed in Section 6.1.

- c. The applicable requirements of the Cross-State Air Pollution Rule for the affected boiler are addressed in Section 6.2.
- d. The applicable requirements of the Mercury and Air Toxics Standards rule for the affected boiler are addressed in Section 6.5.

7.3.3-3 Applicable State Emission Standards

- a. The affected boiler is subject to 35 IAC 212.122, which provides that no person shall cause or allow the opacity from a new fuel combustion emission unit with a heat input greater than 250 mmBtu/hr to exceed 20 percent, except as provided by 35 IAC 212.122(b).
- b. The emissions of PM from the affected boiler shall not exceed 0.1 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.204.
- c. The emissions of CO from the affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.
- d. The affected boiler is subject to the following requirements related to NO<sub>x</sub> emissions pursuant to 35 IAC Part 217 Subpart V:
  - i. During each ozone control period (May 1 through September 30):
    - A. The emissions of NO<sub>x</sub> from the affected boiler shall not exceed 0.25 lb/mmBtu of actual heat input based on an ozone control period average, pursuant to 35 IAC 217.706(a), or
    - B. If the Permittee elects to participate in a NO<sub>x</sub> averaging plan, the emissions of NO<sub>x</sub> from the affected boiler and other eligible EGU that are participating in such NO<sub>x</sub> averaging demonstration shall not exceed 0.25 lb/mmBtu of actual heat input, as averaged for the ozone control period for the EGU participating in the demonstration, pursuant to 35 IAC 217.708(a) and (b). For this purpose, other eligible EGU include: (1) other EGU at this source, and (2) other EGU that are authorized to participate in a NO<sub>x</sub> averaging plan by a CAAPP permit or other federally enforceable permit issued by the Illinois EPA to the owner or operator of those EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NO<sub>x</sub> for purposes of these standards are generally calculated in accordance with the federal Acid Rain Program and are different from the emissions determined for purposes of the NO<sub>x</sub> Trading Program.

- ii. If the Permittee elects to have the affected boiler comply by participation in a NO<sub>x</sub> averaging demonstration as provided for and authorized above:
  - A. The affected boiler shall be included in only one NO<sub>x</sub> averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).
  - B. The NO<sub>x</sub> averaging demonstration shall only include other EGU that are authorized through a federally enforceable permit to participate in a NO<sub>x</sub> averaging demonstration and for which the owner or operator of the EGU maintains the required records, data and reports and submits copies of such records, data, and reports to the Illinois EPA upon request, pursuant to 35 IAC 217.708(g).
  - C. The effect of failure of the NO<sub>x</sub> averaging demonstration to show compliance shall be that the compliance status of the affected boiler shall be determined pursuant to Condition 7.3.3-3(d)(i)(A) as if the NO<sub>x</sub> emission rates of the affected boiler were not averaged with other EGU, pursuant to 35 IAC 217.708(f).

Note: The above requirements also apply as a matter of rule to EGUs other than the affected boiler if the owner or operator of such other EGUs elects to participate in a NO<sub>x</sub> averaging demonstration.

e. Startup Provisions for State Emission Standards

Subject to the following terms and conditions, the Permittee is authorized to operate the affected boiler in violation of the applicable standards in Condition 7.3.3-3(a) (35 IAC 212.122), Condition 7.3.3-3(b) (35 IAC 212.204), and Condition 7.3.3-3(c) (35 IAC 216.121) during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "...to minimize startup emissions, duration of individual startups and frequency of startups."

- i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.
- ii. The Permittee shall conduct startup of the affected boiler in accordance with written procedures prepared and maintained by the Permittee that include, at a minimum, the following measures:
  - A. Use of natural gas during startup to heat the boiler prior to initiating burning of coal.

- B. Timely energization of the WESP as soon as this may be safely accomplished without damage or risk to personnel or equipment.
  - iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.3.9(d) and (i) and 7.3.10-2(a) and 7.3.10-3(b).
  - iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.
- f. Malfunction and Breakdown Provisions for State Emission Standards

Subject to the following provisions, the Permittee is authorized to continue operation of the affected boiler in violation of the applicable requirements of Condition 7.3.3-3(a) (35 IAC 212.122), Condition 7.3.3-3(b) (35 IAC 212.204), and Condition 7.3.3-3(c) (35 IAC 216.121) in the event of a malfunction or breakdown of the affected boiler, including the associated control equipment and support systems (limestone handling system, coal bunkers, coal pulverizers, ash and gypsum removal and handling systems, etc.). This authorization is provided pursuant to 35 IAC 201.149, 201.261 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

- i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.
- ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practical begin shutdown of the boiler within 90 minutes, unless the malfunction is expected to be repaired within 120 minutes or such shutdown could

threaten the stability of the regional electrical power supply. In such case, shutdown of the system shall be undertaken when it is apparent that repair will not be accomplished within 120 minutes or shutdown will not endanger the regional power system.

- iii. The Permittee shall operate the affected boiler and associated air pollution control equipment in accordance with written operating procedures that address likely malfunctions and breakdowns (See also Condition 7.3.5(a)).
- iv. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.3.9(d) and (j) and 7.3.10-2(a) and 7.3.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.
- v. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.
- vi. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.
- g. The applicable requirements of 35 IAC 225 Subpart B for the affected boiler are addressed in Section 6.4.

#### 7.3.4 Non-Applicability Provisions

- a. Pursuant to Section 39.5(7)(a) of the Act, the Permittee is shielded from 35 IAC 212.207 and 214.162 for the affected boiler as solid fuel (coal) is the principal fuel of the affected boiler. This is because incidental use of other fuels generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel.

- b. Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity monitoring because the Permittee must conduct opacity monitoring on the affected boiler in accordance with the NSPS.
- c. The affected boiler is not subject to 40 CFR 60 Subpart CCCC, the NSPS for Commercial and Industrial Solid Waste Incineration Units because the affected boiler does not combust any solid waste as that term is defined in 40 CFR Part 241.
- d. The affected boiler is not subject to 40 CFR Subpart DDDDD, the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, or 40 CFR 63 Subpart JJJJJJ, the NESHAP for Industrial, Commercial, and Institutional Boilers Area Sources. This is because, pursuant to 40 CFR 63.7491(a) and 63.11195(k), an EGU covered by the MATS rule, 40 CFR 63 Subpart UUUUUU, is not subject to 40 CFR 63 Subpart DDDDD or JJJJJJ.
- e. The affected boiler is not subject to Compliance Assurance Monitoring (CAM), 40 CFR Part 64, for certain regulated air pollutants for the following reasons:
  - i. CO and VOM because the applicability criterion in 40 CFR 64.2(a)(2) is not met since the affected boiler does not use add-on control devices to comply with any applicable standards or permit limits for these pollutants.
  - ii. SO<sub>2</sub> and NO<sub>x</sub> pursuant to 40 CFR 64.2(b)(1)(vi), because this CAAPP permit specifies continuous compliance determination methods for applicable standards and permit limits for these pollutants and, as related to the Acid Rain Program, as addressed in Section 6.1, because CAM does not apply for such requirements pursuant to 40 CFR 64.2(b)(1)(iii).
  - iii. Fluorides and lead because the applicability criterion in 40 CFR 64.2(a)(3) is not met by the emissions of these pollutants from the affected boiler.
  - iv. Mercury, as limited by the state mercury emission standards and addressed in Section 6.4, because these standards are not applicable limitations for purposes of CAM. In addition, the mercury emissions of the affected boiler do not meet the applicability criteria in 40 CFR 64.2(a)(3) and, pursuant to 40 CFR 64.2(b)(1)(vi), this CAAPP permit specifies a continuous compliance determination method for these standards.
  - v. HAPs, as limited by the MATS rule and addressed in Section 6.5, pursuant to 40 CFR 64.2(b)(1)(i), because these NESHAP standards were proposed by the USEPA after November 15, 1990.

7.3.5 Control Requirements and Work Practices

- a. The Permittee shall operate the affected boiler and associated air pollution control equipment in accordance with good air pollution control practices to minimize emissions, by operating in accordance with detailed written operating procedures as it is safe to do so. These procedures at a minimum shall include the following [T1]:
  - i. Address startup, normal operation, shutdown and malfunction/breakdown events.
  - ii. With respect to startup, shutdown and malfunction/breakdown, the plan shall fulfill substantive requirements of 40 CFR 63.6(e) for a Startup, Shutdown and Malfunction Plan and be subject to procedural requirements for such plans as if the affected boiler was subject to 40 CFR Part 63, except that the Illinois EPA shall substitute for USEPA for purposes of administration. This plan shall include detailed provisions for review of relevant operating parameters of the affected boiler systems during startup, shutdown and malfunction as necessary to make adjustments and corrections to reduce or eliminate any excess emissions.
  - iii. Specifically with respect to startup, address readily foreseeable startup scenarios, including so called "hot startups" when the operation of the boiler is only temporarily interrupted, and provide for appropriate review of the operational condition of the boiler prior to initiating startup of the boiler.
  - iv.
    - A. With respect to malfunction, identify and address likely malfunction events with specific programs of corrective actions, and provide that upon occurrence of a malfunction that will result in emissions in excess of the applicable limits in Conditions 7.3.3-1(b), 7.3.3-2(a)(i) or 7.7.3-3(a) through (c), the Permittee shall, as soon as practicable, repair the affected equipment, reduce the operating rate of the boiler, remove the boiler from service or take other action so that excess emissions cease.
    - B. Consistent with the above, if the Permittee has maintained and operated the affected boiler and associated air pollution control equipment so that malfunctions are infrequent, sudden, not caused by poor maintenance or careless operation, and in general are not reasonably preventable, the Permittee shall begin shutdown of the boiler within 90 minutes, unless the malfunction is expected to be repaired within 120 minutes or such shutdown could threaten the stability of the regional electrical power supply. In such case, shutdown of the system shall be undertaken when

it is apparent that repair will not be accomplished within 120 minutes or shutdown will not endanger the regional power system. In no case shall shutdown of the boiler be delayed solely for the economic benefit of the Permittee.

Note: If the Permittee determines that the continuous emission monitoring system (CEMS) is inaccurately reporting excess emissions, the boiler may continue to operate provided the Permittee records the information it is relying upon to conclude that the boiler and associated emission control systems are functioning properly and the CEMS is reporting inaccurate data and the Permittee takes prompt action to resolve the accuracy of the CEMS.

- v. With respect to normal operation of the boiler, provide for formal comprehensive "tuning" of the boiler by qualified personnel for good combustion on a periodic basis, with subsequent operation and maintenance of the boiler directed at keeping the boiler in a tuned condition.
- e. The Permittee shall maintain the affected boiler and associated air pollution control equipment in accordance with good air pollution control practices to assure proper functioning of equipment and minimize malfunctions, including maintaining the boiler in accordance with written procedures developed for this purpose [T1].
- f. The Permittee shall handle the fuel for the affected boiler in accordance with a written Fuel Management Plan that shall be designed to provide the boiler with a consistent fuel supply that meets relevant criteria needed for proper operation of the boiler and its control systems [T1].
- g. The Permittee shall review its operating and maintenance procedures and its Fuel Management Plan for the boiler as required above on a regular basis and revise them, if needed, consistent with good air pollution control practices based on actual operating experience and equipment performance. This review shall occur at least annually if not otherwise initiated by occurrence of a startup, shakedown, or malfunction event that is not adequately addressed by the existing plans or a specific request by the Illinois EPA for such review [T1].

#### 7.3.6 Emission Limits

- a. Emissions of SO<sub>2</sub> and NO<sub>x</sub> from the affected boiler shall not exceed 0.20 and 0.10 pounds/mmBtu, respectively, on a rolling average of 30 boiler operating days. For this purpose, emissions shall be determined as the ratio of the mass of emissions and the heat input to the boiler during each period of 30 boiler operating days, with the mass of emissions determined from continuous emission monitoring, as required by Condition 2.3.8 [T1].

Note: The above limits were established in Permit #04110050 to ensure that the Dallman 4 project does not constitute a major modification pursuant to the federal PSD rules for SO<sub>2</sub> or NO<sub>x</sub>.

- b. Emissions from the affected boiler shall not exceed the following short-term limits. Compliance with these limits shall be determined with testing or monitoring as required by Condition 7.3.7 or 7.3.8, as follows, and proper equipment operation in accordance with Condition 7.3.5. For emissions of SO<sub>2</sub> and NO<sub>x</sub>, compliance is to be determined on a rolling average of 30 boiler operating days with continuous emission monitoring. For other pollutants, compliance is to be determined on a 3-hour average basis, consistent with the duration of emission testing as addressed by Condition 7.3.7 [T1].

Pollutant	Short-Term Emission Limits (Pounds/Hour)
CO	293, 3-Hour Average
PM Filterable	29.3, 3-Hour Average
PM Total	85.3, 3-Hour Average
Sulfuric Acid Mist	12.2, 3-Hour Average
SO <sub>2</sub>	490, 30-Day Average
NO <sub>x</sub>	245, 30-Day Average
VOM	8.80, 3-Hour Average
Fluorides	0.60, 3-Hour Average
Lead	0.050, 3-Hour Average

Note: These limits and the limits in Condition 7.3.6(c) address emissions of various regulated NSR pollutants from the affected boiler, including both pollutants for which PSD applied and pollutants for which PSD did not apply.

- c. Emissions from the affected boiler shall not exceed the following annual limits. These limits address all emissions from the boiler, including emissions that occur during periods of startup, shutdown and malfunction, as addressed by Condition 7.3.5(a). Compliance with these limits shall be determined from a rolling total of monthly emission data, i.e., from the sum of emission data for a particular month and the preceding 11 months, for a total of 12 months of data [T1].

Pollutant	Annual Emission Limits (Tons/Year) <sup>c</sup>
CO	1,281
PM Filterable <sup>e</sup>	128
PM Total <sup>f</sup>	374
Sulfuric Acid Mist	53
SO <sub>2</sub>	2,135
NO <sub>x</sub>	1,068
VOM	38.4
Fluorides	2.6
Lead	0.22

7.3.7 Testing Requirements

- a. i. A. The Permittee shall test PM emissions (filterable and condensable) from the affected boiler, as provided below, at a regular interval that is no greater than 30 months, except as follows. If the results of two of these PM tests for the boiler in series demonstrate filterable PM emissions that are 0.009 lb/mmBtu or less, the maximum interval for PM testing of such boiler will be at least once every 48 months. However, if a PM test for such affected boiler then shows PM emissions that are more than two thirds of an applicable limit, the maximum interval between testing shall revert to 30 months until two consecutive tests again show PM emissions that are two thirds or less than the applicable limits. For the purpose of these provisions, the two consecutive tests must be at least 24 months apart.
- B. Whenever PM testing for the affected boiler is performed as required above, testing for emissions of CO and sulfuric acid mist shall also be performed, as provided below.
- ii. In addition to the emission testing required above, the Permittee shall perform emission tests as provided below as requested by the Illinois EPA for the boiler within 45 days of a written request by the Illinois EPA or such later date agreed to by the Illinois EPA.
- b. The following Reference Methods and procedures shall be used for testing:
  - i. The following Reference Methods shall be used unless use of other methods adopted by or being developed by USEPA is approved by the Illinois EPA.

Sampling Points	Method 1
Gas Flow/Velocity	Method 2
Flue Gas Weight	Method 3 or 3A
Moisture	Method 4
PM - Filterable <sup>1</sup>	Methods 5, or 5B
PM - Condensable	Method 202 <sup>2</sup>
CO	Method 10
VOM <sup>2</sup>	Methods 18 and 25A
Fluorides <sup>3</sup>	Method 26
Sulfuric Acid Mist	Method 8 <sup>4</sup>
Particulate Metals <sup>5</sup>	Method 29

Notes:

<sup>1</sup> The Permittee may report PM emissions measured by Reference Method 5 as filterable PM, in which case separate testing using Reference Method 201

or 201A need not be performed to measure filterable PM<sub>10</sub>.

<sup>2</sup> The Permittee may exclude methane, ethane and other exempt compounds from the results of any VOM test provided that the test protocol to quantify and correct for the presence of any such compounds in the exhaust of the boiler is included in the test plan approved by the Illinois EPA.

<sup>3</sup> Results shall be expressed as hydrogen fluoride.

<sup>4</sup> Notwithstanding the general requirement to use Reference Methods, appropriate refinements or adaptations may be made to the Reference Methods or other established test methods may be used for testing for sulfuric acid mist, subject to review and approval by the Illinois EPA to facilitate accurate and reliable measurements given the composition of the exhaust. In particular, adaptations shall be made to Method 202, to prevent positive bias from conversion of SO<sub>2</sub> to sulfuric acid in the impingers, e.g., by additional purges or separate, simultaneous measurements of the sulfuric acid emissions.

<sup>5</sup> Testing for metals shall address emissions of mercury, arsenic, beryllium, cadmium, chromium, lead, manganese, and nickel.

ii. The results of emission testing may be presented as the average of individual test runs to determine compliance, as provided by 40 CFR 60.8(f) and 35 IAC Part 283.

- c. i. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the tests results are compiled and finalized but no later than 60 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information.
- A. Fuel consumption (in tons);
  - B. Composition of fuel (Refer to Condition 7.3.8(b), including the metals, chlorine and fluorine content, expressed in pound per mmBtu;
  - C. Firing rate (mmBtu/hr) and other significant operating parameters of the boiler, including temperature of the flue gas entering the SCR;
  - D. Control device operating rates or parameter, e.g., SCR reagent injection rate, baghouse pressure drop, scrubber pressure drop and reagent

addition rate, and WESP voltages current flows and water flow rate;

- E. Opacity of the exhaust from the boiler, 6-minute averages and 1-hour averages, as measured by the opacity monitor; and
- F. Turbine/Generator output rate (MW gross).

Note: This condition does not address emission testing required by the MATS rule, which is addressed by Condition 6.5, or testing conducted as part of certification of required CEMS or an excepted monitoring system, which is part of the requirements for monitoring.

### 7.3.8 Monitoring Requirements

#### a. Emissions Monitoring - SO<sub>2</sub>, NO<sub>x</sub> and Opacity

- i.
  - A. The Permittee shall install, certify, operate, calibrate, and maintain continuous monitoring systems on the affected boiler for opacity, emissions of SO<sub>2</sub> and NO<sub>x</sub>, and either oxygen or carbon dioxide in the exhaust. The opacity monitor shall be located before the wet control equipment if needed to prevent interference from moisture in the ductwork.
  - B. The Permittee shall also operate and maintain these monitoring systems according to site-specific monitoring plan(s), which shall be submitted at least 60 days before the initial startup of the boiler to the Illinois EPA for review and comment. With this submission, the Permittee shall submit the proposed type of monitoring equipment and proposed sampling location(s), which shall be approved by the Illinois EPA prior to installation of equipment.
  - C. The Permittee shall fulfill the applicable requirements for monitoring in the NSPS, 40 CFR 60.13, 60.47a, and 40 CFR 60 Appendix B and the federal Acid Rain Program, 40 CFR Part 75. These rules require that the Permittee maintain detailed records for both the measurements made by these systems and the maintenance, calibration and operational activity associated with the monitoring systems.
  - D. The data management system(s) associated with the continuous monitoring systems shall have the ability to appropriately handle collected monitoring data, as well as relevant operational data, to determine emissions in the various terms that are needed to verify compliance with applicable emission standards and limits.

- ii. In addition, when NO<sub>x</sub> or SO<sub>2</sub> emission data are not obtained from a continuous monitoring system because of system breakdowns, repairs, calibration checks and zero span adjustments, emission data shall be obtained by using standby monitoring systems, emission testing using appropriate Reference Methods, or other approved methods as necessary to provide emission data for a minimum of 75 percent of the operating hours in the boiler operating day, in at least 22 out of 30 successive boiler operating days, pursuant to 40 CFR 60.47a(f) and (h).
  - iii. Fulfillment of the above criteria for availability of emission data from a monitoring system does not shield the Permittee from potential enforcement for failure to properly maintain and operate the system.
- b. Operational Monitoring and Measurements
- i. The Permittee shall install, evaluate, operate, and maintain meters to measure and record consumption of natural gas by the affected boiler.
  - ii. A. The Permittee shall sample and analyze the sulfur and heat content of the coal supplied to the boiler in accordance with Reference Method 19.  
B. The Permittee shall analyze samples of all coal supplies that are components of the coal supply to the boiler and the coal supply, itself, for mercury and other metals and chlorine content, as follows:
    - I. Analysis shall be conducted in accordance with Reference Methods or other method approved by USEPA.
    - II. Analysis of the fuel supply to the boiler, itself, shall be conducted in conjunction with performance testing of the boiler.
    - III. Analysis of representative samples of coal shall be conducted in conjunction with acceptance of coal from another mine.
    - IV. Analysis of representative samples of coal shall be conducted at least every two years, if a more frequent analysis is not needed pursuant to the above requirements.
  - iii. A. The Permittee shall operate and maintain continuous parametric monitoring systems (CPMS) to measure key operating parameters of the control system for the boiler, including [T1]:
    - I. Reagent injection rate for the SCR system;
    - II. Pressure drop across the baghouse;

III. Reagent addition rate for the scrubber; and

IV. Voltages, currents, sparking rates and water flow for the WESP.

B. The Permittee shall maintain the records of the measurements made by these systems and records of maintenance and operational activity associated with these systems.

iv. The Permittee shall install and operate a continuous emissions monitoring system (CEMS) for PM on the affected boiler for the purpose of compliance assurance monitoring, as follows [T1]:

A. This CEMS shall monitor PM concentration downstream of the WESP.

B. The Permittee shall operate, calibrate and maintain this system in accordance with the applicable USEPA performance specification and other applicable requirements of the NSPS for monitoring systems and in a manner that is generally consistent with published USEPA guidance for use of such systems for compliance assurance monitoring.

C. The Permittee shall also operate and maintain this system according to a site-specific monitoring plan.

c. Compliance Assurance Monitoring (CAM) Requirements

The affected boiler is subject to 40 CFR Part 64, Compliance Assurance Monitoring for Major Stationary Sources (CAM), for emissions of PM filterable, PM total and sulfuric acid mist. The Permittee shall comply with the requirements of CAM and the CAM Plans submitted for these pollutants, as described in Attachment 4, Tables 4.2A, 4.2B, 4.3 and 4.4. At all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment [40 CFR 64.7(a) and (b)].

i. Continued Operation [40 CFR 64.7(c)]

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this

part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The Permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

- ii. Response to Excursions or Exceedances [40 CFR 64.7(d)]
  - A. Upon detecting an excursion or exceedance, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
  - B. Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device.

#### 7.3.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected boiler and associated control equipment, pursuant to Section 39.5(7) (b) of the Act:

- a. An operating log for the boiler that, at a minimum, shall address:
  - i. Inspection, maintenance and repair log(s) for the boiler system that, at a minimum, shall identify such activities that are performed related to components

that may affect emissions; the reason for such activities, i.e., whether planned or initiated due to a specific event or condition; and any failure to carry out the established maintenance procedures, with explanation.

- ii. Records for the tuning of the boiler required by Condition 7.3.5(a)(v), including identification of the event, condition of the boiler prior to tuning, the condition of the boiler after tuning, and the parameters set as proper tuning of the boiler.
- iii. Daily records of electricity generation.

b. Maintenance and Repair Records for Control Equipment

Pursuant to Sections 39.5(7)(a) and (e) of the Act, the Permittee shall keep maintenance and repair records for each control device for the affected boiler, which records shall list the activities performed, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

c. Records for the Coal Used in the Affected Boiler

The Permittee shall maintain the following records related to the coal used in the boiler:

- i. A. Records of the sampling and analysis of the coal supply to the boiler conducted in accordance with Condition 7.3.8(b).
- B. Records of agreements with suppliers, including origin of material, specifications for heat and ash content, and representative data for elemental composition of the coal, including mercury and other heavy metals, chlorine and fluorine in accordance with Condition 7.3.8(b).
- ii. A. Records of the sulfur content of fuel, lbs sulfur/mmBtu, supplied to the boiler, as determined pursuant to Condition 7.3.8(b).
- B. Records of the sulfur content of coal supplied to the boiler on a 30-day rolling average, determined from the above data.
- iii. Records of the amount of fuel fired in the boiler by type of fuel as specified in Reference Method 19.

d. Records for Continuous Opacity Monitoring System

Pursuant to Section 39.5(7)(e) of the Act, and the NSPS, 40 CFR 60.45a, the Permittee shall maintain records for the opacity monitoring system on the affected boiler required by Condition 7.3.8(a) that as a minimum shall include the following:

- i. Operating records for each opacity monitoring system, including:
  - A. Opacity measurements.
  - B. Continuous monitoring system performance testing measurements.
  - C. Performance evaluations and other quality assurance/control activities.
  - D. Calibration checks.
  - E. Maintenance and adjustment performed.
  - F. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason.
  - G. Quarterly reports submitted in accordance with NSPS, 40 CFR 60.7(c) and Condition 7.3.10-2(a) and (d).

e. Records for Continuous SO<sub>2</sub> Monitoring Systems

Pursuant to 40 CFR 60.45, 40 CFR 75.50, and Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the SO<sub>2</sub> CEMS on the affected boiler required by Condition 7.3.8(a) that as a minimum shall include the following:

- i. SO<sub>2</sub> emission data in units of the applicable standards (lbs/mmBtu) calculated in accordance with NSPS, 40 CFR 60.45a(e).
- ii. Continuous monitoring system performance testing measurements.
- iii. Performance evaluations and other quality assurance /control activities.
- iv. Calibration checks.
- v. Maintenance and adjustments performed.
- vi. Periods when the SO<sub>2</sub> CEMS was inoperative, with date, time and reason.
- vii. Data reduction information.
- viii. Quarterly reports submitted in accordance with NSPS, 40 CFR 60.7(c) and Conditions 7.3.10-2(a) and (b).

f. Records for Continuous NO<sub>x</sub> Monitoring

Pursuant to 40 CFR 75.50, 35 IAC 217.712(a), and Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the NO<sub>x</sub> CEMS on the affected boiler required by Condition

7.3.8(a) in accordance with the applicable recordkeeping requirements of 40 CFR 75, that as a minimum shall include the following:

- i. NO<sub>x</sub> emission data in units of the applicable standards (lbs/mmBtu) calculated in accordance with NSPS, 40 CFR 60.45a(e).
  - ii. Continuous monitoring system performance testing measurements.
  - iii. Performance evaluations and other quality assurance/control activities.
  - iv. Calibration checks.
  - v. Maintenance and adjustments performed.
  - vii. Periods when the CEMS was inoperative, with date, time and reason.
  - viii. Data reduction information.
  - ix. Quarterly reports submitted in accordance with Conditions 7.3.10-2(a) and (c).
- g. Other Records for Emissions

The Permittee shall maintain the following records related to emissions of the boiler:

- i. Records of SO<sub>2</sub> and NO<sub>x</sub> emissions and operation for each boiler-operating day, as specified by 40 CFR 60.49a.
- ii. With respect to the SO<sub>2</sub> reduction-based standard in 40 CFR 60.43a(a)(1), for each 30 day averaging period, records of the SO<sub>2</sub> emissions in lbs/mmBtu and the required SO<sub>2</sub> emission rate as determined by applying the permissible emission fraction to the potential SO<sub>2</sub> emission rate of the coal supply.
- iii. With respect to the limits for SO<sub>2</sub> and NO<sub>x</sub> in Conditions 7.3.3-1 and 7.3.6(a), records of the SO<sub>2</sub> and NO<sub>x</sub> emission rate in lbs/mmBtu and lbs/hour, for each 30-day averaging period.
- iv. With respect to the limits in Conditions 7.3.3-2(a)(i)(B) and 7.3.3-3(a), records of opacity for each 6-minute period when the opacity was above (20 percent opacity) with date, time, whether it occurred during startup, malfunction (malfunction/breakdown), or shutdown, and further explanation of the incident.
- v. For filterable PM, total PM, sulfuric acid mist, CO, VOM and fluorides lead and CO, i.e., pollutants subject to annual emission limits for which

continuous emissions monitoring is not performed to determine compliance, the following records:

- A. Records of the standard emission factors used by the Permittee to determine emissions, with supporting documentation.
- B. Records of emissions based on fuel usage, operating data for the boiler and associated control equipment, and the appropriate emission factors, as addressed above, with supporting calculations.

h. Records for Deviations

The Permittee shall record the following information for any period during which the affected boiler deviated from an applicable requirement:

- i. Each period during which the boiler exceeded the requirements of this permit, including applicable emission limits, which records shall include at least the information specified by Condition 7.3.9(k) (ii).
- ii. Each period during which opacity of the boiler exceeded the level of opacity at which emission testing has demonstrated that the boiler would comply with PM emission limits.

i. Records for Startup

Pursuant to Section 39.5(7) (b) of the Act, the Permittee shall maintain the following records for the affected boiler:

- i. The Permittee shall maintain a copy of the written operating procedures for the affected boiler and associated air pollution control equipment, as required by Condition 7.3.3-3(e) (ii) and 7.3.5(a).
- ii. The Permittee shall maintain the following records related to startups of the affected boiler:
  - A. For all startups on the affected boiler.
    - I. Date, time and duration of the startup.
    - II. A description of the startup and reason(s) for the startup with additional documentation showing that written startup procedures were followed including any deviations from established procedures and the reason the procedure could not be followed.
  - B. For each startup of the affected boiler where an exceedance from a relevant standard did or may have occurred during startup, maintain the following additional records for such startups.

- I. Identification of the applicable standard(s) that were or may have been exceeded.
  - II. An explanation of the nature of such exceedance(s), including the magnitude of such excess emissions.
  - III. A description of the actions taken or to be taken to minimize the magnitude and duration of excess emissions.
  - IV. An explanation whether similar incidents could be prevented or ameliorated in the future and if so, a description of the actions taken or to be taken to prevent similar incidents in the future.
- C. For each startup when an exceedance of a relevant standard occurred or the duration of startup from initial firing of fuel to stable operation of the generating unit at load exceeded 18 hours maintain the following additional records for such startups.
- I. A description of the events that led up to the extended startup duration.
  - II. The reason(s) for the extended startup duration.
  - III. An explanation of the consequences of the prolonged startup as it relates to the magnitude of emissions, including:
    - 1. The actions taken to minimize emissions and the duration of the startup, and
    - 2. An explanation whether similar incidents might be prevented in the future and if so, the corrective actions taken or to be taken to prevent similar incidents.
- j. Records for Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (e) of the Act, the Permittee shall maintain the following records related to malfunction and breakdown of the affected boiler:

- i. Maintenance and repair record(s) for the affected boiler that, at a minimum, address aspects or components of the boiler for which malfunction or breakdown has resulted in excess emissions, which shall list the activities performed on such aspects or components, with date, description and reason for

the activity. In addition, in the maintenance and repair record(s) for control equipment required by Condition 7.3.9(b), the Permittee shall also list the reason for the activities that are performed.

- ii. Records for each incident when operation of the affected boiler continued with excess opacity or emissions, including malfunction or breakdown as addressed by Condition 7.3.3-3(f), that, at a minimum, include the following information:
  - A. Date, time, duration and description of the incident.
  - B. The corrective actions used to reduce the quantity of emissions and the duration of the incident.
  - C. Confirmation of fulfillment of the requirements of Condition 7.3.10-3(a), as applicable, including copies of follow-up reports submitted pursuant to Condition 7.3.10-3(a).
  - D. If opacity exceeded the applicable standard for two or more hours or emissions exceeded or may have exceeded an applicable hourly standard, as listed in Condition 7.3.3-3(b) or (c), during the incident:
    - I. A detailed explanation why continued operation of the affected boiler was necessary.
    - II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boiler and associated equipment and any changes to operating and maintenance procedures.
    - III. An estimate on a qualitative or, if available, quantitative basis of whether emissions of PM and CO during the incident exceeded or may have exceeded any applicable hourly standard.

#### 7.3.10-1 Reporting Requirements - Reporting of Deviations

##### a. Prompt Reporting of Deviations

For the affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. At a minimum, these notifications shall include a description of such deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the possible cause of such deviations, any corrective actions and any preventative measures taken [Section 39.5(7)(f)(ii) of the Act].

- i. Notification and reporting as specified in Condition 7.3.10-3(a) for certain deviations from the PM limits in Conditions 7.3.3-1(b) (A), 7.3.3-2(a) (ii), 7.3.3-3(b), and 7.3.6(b).
- ii. Notification and reporting as specified in Condition 7.3.10-3(a) for certain deviations from the opacity standards in Conditions 7.3.3-2(a) (i) (B) and 7.3.3-3(a).
- iii. Notification with the reports required by Conditions 7.3.10-2(b), (c), (d) and (e) for deviations from emission limits in Condition 7.3.3-1(b),\* 7.3.3-2(a) (ii),\* 7.3.3-3( (c), and 7.3.6(b)and from the requirements of Condition 7.3.8 for emissions monitoring.

\* Other than limits for PM.

- iv. Notification with the quarterly reports required by Condition 7.3.10-2(a) for deviations not addressed above by Conditions 7.3.10-1(a) (i), (ii) or (iii), including deviations from other applicable requirements, e.g., work practice requirements, annual emission limits and recordkeeping requirements.

b. Periodic Reporting of Deviations

The quarterly reports required by Condition 7.3.10-2(a) shall include the following information for the affected boiler related to deviations from permit requirements during the quarter [Sections 39.5(7) (a) and (f) (i) of the Act].

- i. A listing of all instances of deviations that have been reported in writing to the Illinois EPA as provided by Conditions 7.3.10-1(a) (i) and (ii), including identification of each such written notification or report. For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.
- ii. Detailed information, as required by Conditions 7.3.10-1(a) (iii) or (iv), for all other deviations not addressed in the above listing.

7.3.10-2 Reporting Requirements - Periodic Reporting

a. Quarterly Reports

In place of the semi-annual monitoring reports otherwise required by Condition 8.6.1, the Permittee shall submit quarterly reports to the Illinois EPA pursuant to Sections 39.5(7) (a) and (f) of the Act.

- i. These reports shall include the following information for operation of the affected boiler during the quarter:
  - A. The total operating hours for the affected boiler, as also reported in accordance with 40 CFR Part 75.
  - B. The greatest load achieved by the affected boiler (steam flow or gross megawatts).
  - C. A discussion of significant changes in the fuel supply to the affected boiler, if any, including changes in the source of coal, the introduction of new fuel materials other than coal, gas and oil, and changes in the source of such other fuel materials or the maximum rate at which they will be fired.
  - D. A list of the startups of the affected boiler, including the date, duration and description of each startup. When any startup resulted in an exceedance, a copy of the records required in Condition 7.3.9(i), shall be included in this report when such records were required.
- ii. These report shall include the information for SO<sub>2</sub>, NO<sub>x</sub>, and PM emissions and opacity from the affected boiler during the quarter and the operation of required continuous monitoring systems specified by Conditions 7.3.10-2(b), (c) and (d).
- iii. These reports shall be submitted after the end of every calendar quarter as follows:

Monitoring Period	Submittal Deadline
January - March	April 30
April - June	July 30
July - September	October 30
October - December	January 30

b. Reporting of SO<sub>2</sub> Emissions

Pursuant to Sections 39.5(7)(e) of the Act and the NSPS 40 CFR 60.45a(g), the Permittee shall report the following information to the Illinois EPA in accordance with 40 CFR 60.7(c) for the affected boiler with its quarterly reports pursuant to Condition 7.3.10-2(a):

- i. Summary information on the performance of SO<sub>2</sub> CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the SO<sub>2</sub> CEMS was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.
- ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boiler, the date and

time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed, and the date and duration of any periods when the CEMS was out-of-control as addressed by 40 CFR 75.24.

- iii. The following information for each period when SO<sub>2</sub> emissions were in excess of the applicable standard or limit specified in Condition 7.3.3-2(a)(ii) or 7.3.6(a) or (b). When there were no such exceedances, this shall be stated in the report.
  - A. The starting date and time of the SO<sub>2</sub> excess emissions.
  - B. The duration of the excess emissions.
  - C. A copy of the records for the excess emissions, as maintained pursuant to Conditions 7.3.9(e) and (g), including the measured emission rate.
  - D. A detailed explanation of the cause of the excess emissions.
  - E. A detailed explanation of corrective actions and actions taken to lessen the emissions.

c. Reporting of NO<sub>x</sub> Emissions

Pursuant to Sections 39.5(7)(a) and (f) of the Act and the NSPS 40 CFR 60.45a(g), the Permittee shall report the following information for the affected boiler to the Illinois EPA in accordance with 40 CFR 60.7(c) with its quarterly reports pursuant to Condition 7.3.10-2(a):

- i. Summary information on the performance of the NO<sub>x</sub> CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the NO<sub>x</sub> CEMS was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.
- ii. If specifically requested by the Illinois EPA or the CEMS downtime was more than 5 percent of the total operating time for the affected boiler: the date and time identifying each period during which the CEMS was inoperative except for zero and span checks, and the nature of CEMS repairs or adjustments and a summary of quality assurance data consistent with 40 CFR Part 75, i.e., the dates and results of the Linearity Test(s) and any Relative Accuracy Test Audit(s) during the quarter, a listing of any days when a required daily calibration was not performed,

and the date and duration of any periods when the CEMS was out-of-control as addressed by 40 CFR 75.24.

- iii. The following information for each period when NO<sub>x</sub> emissions were in excess of the standard or limit in Condition 7.3.3-2(a)(i) or 7.3.6(a) or (b). When there were no such exceedances, this shall be stated in the report:
  - A. The starting date and time of the NO<sub>x</sub> excess emissions.
  - B. The duration of the excess emissions.
  - C. A copy of the records for the excess emissions, as maintained pursuant to Condition 7.3.9(f) and (g), including the measured emission rate.
  - D. A detailed explanation of the cause of the excess emissions.
  - E. A detailed explanation of corrective actions and actions taken to lessen the emissions.

d. Reporting Related to Opacity and PM Emissions

Pursuant to Sections 39.5(7)(b) and (f) of the Act and the NSPS, 40 CFR 60.45a(g), the Permittee shall report the following information for the affected boiler to the Illinois EPA with its quarterly reports pursuant to Condition 7.3.10-2(a):

- i. Information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" in accordance with 40 CFR 60.7(d). Additionally, the quarterly report shall also include:
  - A. The total operating time of the affected boiler; and
  - B. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative except for zero and span checks.
- ii. When no excess opacity occurred or the continuous opacity monitoring system has not been inoperative, repaired or adjusted such information shall be stated in the report as specified by 40 CFR 60.7(c)(4).
- iii. The following information for each period when opacity was in excess of the applicable standards in Conditions 7.3.3-2(a)(ii) and 7.3.3-2(a), i.e., 20 percent, six-minute average:
  - A. The starting dates and time of the exceedance.

- B. The duration of the excess opacity.
- C. The magnitude of excess opacity, based on six minute average opacity, including:
  - I. The percent opacity for each six-minute period.
  - II. The start and stop time of each six minute period in excess of the standard.
- D. The cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of the boiler.
- E. Any corrective actions taken.
- F. Identification of any previous report for the incident submitted to the Illinois EPA pursuant to Condition 7.3.10-3(a) (ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
- G. Information required by Condition 7.3.9(j) (ii) (A), (B) and (D) (I) for incidents when operation of the affected boiler continued during malfunction or breakdown with excess emissions that are not addressed by individual reports submitted pursuant to Condition 7.3.10-3(a) (ii).

Note: While the NSPS provides that one 6-minute period per hour during which the average opacity of emissions exceeds 20 percent opacity, but not more than 27 percent opacity need not be reported (40 CFR 60.45a(g) (1)), such a provisions does not accompany 35 IAC 212.122.

- iv. The following information for periods when PM emissions were in excess of the limit in Condition 7.3.3-3(b). If there were no such exceedances during the reporting period, the quarterly report shall so state.
  - A. A summary of information for each period of exceedance that includes:
    - I. The starting date and time of the exceedance.
    - II. The duration of the exceedance.
    - III. The magnitude of the exceedance.
    - IV. The percent opacity measured for each six-minute period during the exceedance.

- V. The means by which the exceedance was indicated or identified, in addition to the level of opacity.
  - VI. The cause of the exceedance, including whether the exceedance occurred during startup, malfunction or breakdown.
  - VII. Corrective actions and actions taken to lessen the emissions.
- B. Identification of the previous reports for the incidents submitted to the Illinois EPA pursuant to Condition 7.3.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.
- v. The following summary information related to opacity and PM exceedances:
- A. Further information for each type of recurring opacity exceedance that occurred during the quarter, including: a discussion of any circumstances or events during the quarter that generally affected the number or magnitude of such exceedances; a discussion of any additional understanding of the causes for such exceedances gained during the quarter, including the role of component failure or degradation, maintenance practices, and operating procedures; a general discussion of the effectiveness of the corrective actions that were taken in response to such exceedances; and a general discussion of further actions that are being considered to address such exceedances.
  - B. Further information for any new type(s) of opacity exceedances that occurred during the quarter including: a general narrative description for the type(s) of exceedance; a general explanation of the cause(s) for such exceedances, including the role of component failure or degradation, maintenance practices, and operating procedures; a detailed explanation of the corrective actions that have been taken for such exceedances, including the reasons that the selected actions were taken, the effectiveness of those actions, and the likelihood of future occurrence of similar exceedances; and a general discussion of possible further actions that could be taken to address such exceedances. For this purpose, new type(s) of exceedance are ones that have not been addressed in the preceding four quarterly opacity reports.
  - C. Other information relevant to generally explaining the number and magnitude of opacity

and PM exceedances during the quarter, e.g., a further discussion of specific events or circumstances that occurred that affected the number of magnitude or exceedances during the quarter.

- D. Information describing actions taken during the quarter that should generally act to significantly reduce the number or magnitude of future opacity or PM exceedances, e.g., a summary of relevant upgrades or replacements of components that were completed, with a description of such actions, an explanation of their relationship to exceedances, and a discussion of their anticipated effect on future exceedances.

- vi. A glossary of common technical terms used by the Permittee in its reports pursuant to this Condition 7.3.10-2(d), including the definitions for the categories used by the Permittee to classify exceedance events.

- e. Reporting of NO<sub>x</sub> Emissions for the Ozone Control Period

The Permittee shall submit a report to the Illinois EPA by November 30 of each year that demonstrates whether the affected boiler has complied with Condition 7.3.3-3(d), pursuant to 35 IAC 217.712(d) and (e).

- i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.3.3-3(d) (i) (A), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and NO<sub>x</sub> emissions of the unit for the ozone control period.
- ii. If the Permittee is demonstrating compliance by means of "NO<sub>x</sub> averaging" as authorized by Condition 7.3.3-3(d) (ii) (B), this report shall contain the information specified by 35 IAC 217.712(e) and other related information as follows:

- A. In all cases, for the affected boiler or unit covered by this permit that is participating in the NO<sub>x</sub> averaging demonstration, the Permittee shall report the following:

- I. Identification of the other EGU that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.3.10-2(e) (ii) (B) below.

- II. A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in

only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).

III. The average NO<sub>x</sub> emission rate for the unit, with calculations and supporting information, as required by 35 IAC 217.712(e) (2) and (3), including the heat input and NO<sub>x</sub> emissions of the unit for the ozone control period.

IV. A statement whether the unit would show compliance on its own in the absence of averaging.

B. If the Permittee is the lead party for a NO<sub>x</sub> averaging demonstration, the Permittee shall report the following:

I. Copies of the information submitted by other parties for the EGU participating in the demonstration, which include all material required by Condition 7.3.10-2(e) (ii) (A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).

II. The averaged NO<sub>x</sub> emission rate for all EGU participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e) (1).

III. A statement whether the demonstration shows compliance.

f. Submittal of Supplemental Information Related to NO<sub>x</sub> Emissions during the Ozone Control Period

The Permittee shall submit copies of any records and data required by 35 IAC 217.712 to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA [35 IAC 217.712(g)].

### 7.3.10-3 Reporting Requirements - Notifications

a. Reporting of Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263 and Sections 39.5(7) (a) and (f) of the Act, the Permittee shall provide the following notifications and reports to the Illinois EPA, Air Compliance Section and Air Regional Office, concerning incidents when operation of the affected boiler, or associated support system, continued with excess emissions, including continued operation during malfunction or breakdown as addressed by

Condition 7.3.3(f). These requirements do not apply to such excess emissions, if any, that occur during startup or shutdown of the affected boiler.

- i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity exceeds 30 percent for eight or more 6-minute averaging periods unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during an incident only exceeds 20 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Conditions 7.3.10-1(b) and 7.3.10-2(d).)
  - ii. Upon conclusion of each incident in which the applicable PM emission standard may have been exceeded or in which exceedances of the opacity standard are two hours or more in duration, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days that includes: a detailed description of the incident and its cause(s); an explanation why continued operation of the affected boiler was necessary; the length of time during which operation continued under such conditions, until repairs were completed or the boiler was taken out of service; a description of the measures taken to minimize and correct deficiencies with chronology; and a description of the preventative measures that have been and are being taken.
- b. Startups that resulted in excess emissions shall be addressed in the reports as required by Condition 7.3.10-2(a) accompanied by the records required in Condition 7.3.9(j) (ii) (B).

#### 7.3.11 Compliance Procedures

- a. Compliance with the emission limits for PM in Conditions 7.3.3-1(b) (i) (A), 7.3.3-2(a) (i) (A), 7.3.3-3(b) and 7.3.6(b) is addressed by work practice requirements in Condition 7.3.3-1(c) and 7.3.5, emission testing requirements in Condition 7.3.7, the opacity, PM and CAM monitoring requirements in Conditions 7.3.8, records required by Condition 7.3.9, and reports required by Condition 7.3.10.
- b. Compliance with the emission limits for PM total in Conditions 7.3.3-1(b) (i) (B) and 7.3.6(b) is addressed by work practices requirements in Condition 7.3.5, emission testing requirements in Condition 7.3.7, the opacity, operational, PM and CAM monitoring requirements in Conditions 7.3.8, records required by Condition 7.3.9, and reports required by Condition 7.3.10.
- c. Compliance with the emission limits for CO in Conditions 7.3.3-1(b) (i) (C), 7.3.3-3(c) and 7.3.6(b) is addressed by

work practice requirements in Condition 7.3.5, emission testing requirements in Condition 7.3.7, records required by Condition 7.3.9, and reports required by Condition 7.3.10.

- d. Compliance with the emission limits for sulfuric acid mist in Conditions 7.3.3-1(b) (i) (D) and 7.3.6(b) is addressed by emission testing requirements in Condition 7.3.7, operational and CAM monitoring requirements in Conditions 7.3.8, records required by Condition 7.3.9, and reports required by Condition 7.3.10.
- e. Compliance with the opacity standards in Condition 7.3.3-2(a) (i) (B) and 7.3.3-3(a) is addressed by work practice requirements in Condition 7.3.3-3(e) and (f) and 7.3.5, the opacity monitoring requirements in Conditions 7.3.8(a), records required by Condition 7.3.9, and reports required by Condition 7.3.10.
- f. Compliance with the emission limits for SO<sub>2</sub> and NO<sub>x</sub> in Conditions 7.3.3-2(a) (i) (C) and (D), 7.3.3-3(d) and 7.3.6(a), (b) and (c) is addressed by the continuous emissions monitoring requirements in Conditions 7.3.8(a), the records required in Condition 7.3.9, and the reports required in Condition 7.3.10.
- g. Compliance with the emission limit for VOM in Condition 7.3.6(b) is addressed by work practice requirements in Condition 7.3.5, emission testing requirements in Condition 7.3.7, records required by Condition 7.3.9, and reports required by Condition 7.3.10.
- h. Compliance with the emission limits for fluorides and lead in Condition 7.3.6(b) is addressed by work practice requirements in Condition 7.3.5, emission testing requirements in Condition 7.3.7, monitoring requirements in Conditions 7.3.8, records required by Condition 7.3.9, and reports required by Condition 7.3.10.
- i. Compliance with the limits for annual emission of PM, PM total, sulfuric acid mist, VOM, fluorides and lead in Condition 7.3.6(b) is addressed by records required by Condition 7.3.9, and reports required by Condition 7.3.10.
- j. Compliance with the work practice requirements in Conditions 7.3.3-1(c), 7.3.3-2(a) (iii), 7.3.3-3(e) and (f) and 7.3.5 is addressed by records required by Condition 7.3.9 and reports required by Condition 7.3.10.

## 7.4 Existing Coal Handling Equipment

### 7.4.1 Description

The Permittee transfers and stores coal for the existing boilers in a series of operations, including, truck unloading, various conveyor belts (with associated hoppers, diverters, and transfer points), storage piles (with stackers and feeders), and bunkers. These operations first handle coal, as supplied by the mine and then, after the crushers, coal that has been processed at the source by the coal processing equipment (See Section 7.5). Particulate matter (PM) emissions associated with these operations are controlled by various measures including the moisture content of the coal, enclosures, and covers.

Note: The description in Condition 7.4.1 is for informational purposes only and implies no limits or constraints

### 7.4.2 List of Emission Units and Air Pollution Control Equipment

#### Coal Receiving Operations

NSPS Equipment	Non-NSPS Equipment
Coal Transfer Conveyors	Truck Unloading
Enclosures and Covers	Outdoor Storage Piles
Coal Storage Bunkers	

### 7.4.3 Applicability Provisions

- a. The "affected operations" for the purpose of these unit-specific conditions, are the emission units that are used solely for the purpose of transferring coal or other solid fuel from one location to another or for storage of coal or other solid fuel, without changing the size of the fuel, e.g., by crushing or screening, as described in Conditions 7.4.1 and 7.4.2.

### 7.4.4 Applicable Emission Standards

- a. The affected operations shall comply with the standard in Condition 5.2.2(a), which generally addresses visible emissions of fugitive particulate matter, as defined by 35 IAC 211.2490, pursuant to 35 IAC 212.301.
- b. The affected operations shall comply with the 30 percent opacity standard, pursuant to 35 IAC 212.123(a), which generally requires that the emission of smoke or other particulate matter from the affected operations shall not exhibit an opacity greater than 30 percent, into the atmosphere, except as allowed by 35 IAC 212.123(b) and 212.124.
- c. The affected operations shall comply with the NSPS, 40 CFR 60 Subpart Y, i.e.: shall not exhibit 20 percent opacity or greater into the atmosphere, pursuant to 40 CFR 60.252(b), except during periods of startup, shutdown and malfunction, as defined in 40 CFR 60.2, pursuant to 40 CFR 60.11(c) and

60.252(b). The affected operations, are also "affected facilities" for purposes of the New Source Performance Standards (NSPS) for Coal Preparation Plants, 40 CFR 60 Subpart Y, pursuant to 40 CFR 60.250(a) and 60.251. This is because the affected operations commenced construction or modification after October 24, 1974, and on or before April 28, 2008 and because this source processes more than 200 tons per day of coal by breaking or crushing, as addressed by this section and section 7.5 of this permit. These affected facilities are subject to applicable requirements of the NSPS, 40 CFR 60 Subpart Y and related requirements in the NSPS, 40 CFR 60 Subpart A, General Provisions.

- i. Coal conveying equipment, i.e., equipment used to convey coal to or remove coal from machinery used to reduce the size of coal or separate coal from refuse.
- ii. Coal storage systems, i.e., any facility used to store coal except for open storage piles.

#### 7.4.5 Non-Applicability of Regulations of Concern

- a. The affected operations are not subject to 35 IAC 212.321 or 212.322 because of the disperse nature of the operations, as generally addressed by 35 IAC 212.323.
- b. The affected operations are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected operations do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

#### 7.4.6 Work Practices, Operational and Production Limits, and Emission Limitations

- a.
  - i. The Permittee shall implement and maintain those control measures for the affected operations, that are "established", to minimize visible emissions of particulate matter and provide assurance of compliance with the applicable emission control requirements in Conditions 7.4.4, pursuant to Section 39.5(7)(a) of the Act. "Established" control measures may include enclosure, natural surface moisture, application of dust suppressant and use of dust collection devices, and provide for different control measures depending upon circumstances.
  - ii. The Permittee shall operate and maintain each affected operation with the control measures identified in the records required by Condition 7.4.9(b).
  - iii. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected operation in a manner consistent with good air pollution control practice for minimizing emissions.

Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

7.4.7 Opacity Testing Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected operations during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to 40 CFR 60, Subpart Y and Sections 39.5(7)(d) of the Act.
  - A. The testing of fugitive emissions from the affected operations shall be conducted at least annually.
  - B. Upon written request by the Illinois EPA, such testing shall be conducted for specific affected operation(s) within 45 calendar days of the request or on the date agreed upon by the Illinois EPA, whichever is later.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 10.0 percent.
- iii. A. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).
  - B. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:
  - A. Date and time of testing.
  - B. Name and employer of qualified observer.
  - C. Copy of current certification.

- D. Description of observation condition, including recent weather.
- E. Description of the operating conditions of the affected operations.
- F. Raw data.
- G. Opacity determinations.
- H. Conclusions.

#### 7.4.8 Inspection Requirements

- a. The Permittee shall perform inspections of the affected operations on at least a monthly basis, while the affected operations are in use, to confirm compliance with the requirements of Condition 7.4.4(b). These inspections shall be certified by supervisory or management personnel [Sections 39.5(7) (a) and (d) of the Act].
- b. As part of the inspections of Condition 7.4.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with Reference Method 22 to confirm compliance with the requirements of Condition 7.4.4(b). These observations from the affected processes that are in routine service shall be observed at least once during each calendar year. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the operations to no visible emission or observations of opacity by Reference Method 9 shall be conducted within one week as required in Condition 7.4.7(a) [Sections 39.5(7) (a) and (d) of the Act].

#### 7.4.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected operations, pursuant to Section 39.5(7) (a) and (e) of the Act:

- a. The Permittee shall keep the following file(s) and record(s):
  - i. The maximum operating capacity of each affected operation, (tons/hour).
- b.
  - i. The Permittee shall maintain a record, which shall be kept up to date, of the established control measures for each affected operation pursuant to Condition 7.4.6(a).
  - ii. Copies of these records shall be submitted to the Illinois EPA within 60 days of the date of issuance of this permit.
  - iii. Any subsequent revisions to this record shall be submitted within 30 days of the date of the revision.

- c. The Permittee shall maintain a record of the amount of coal and other solid fuels received at the source, by type of fuel (tons/month and tons/year).
- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.4.8:
  - i. For the inspections required by Condition 7.4.8(a) for each affected operation:
    - A. Date and time the inspection was performed and name(s) of inspection personnel.
    - B. The observed condition of the control measures for each affected operation, including the presence of any visible emissions.
    - C. A description of any maintenance or repair associated with established control measures that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.
- e. The Permittee shall maintain records of the following for each incident when any affected operation operated without the established control measures:
  - i. The date of the incident and identification of the affected operations that were involved.
  - ii. A description of the incident, including the established control measures that were not present or implemented; the established control measures that were present, if any; and other control measures or mitigation measures that were implemented.
  - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
  - iv. The length of time after the incident was identified that the affected operations continued to operate before established control measures were in place or the operations were shutdown (to resume operation only after established control measures were in place) and, if this time was more than one hour, an explanation why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
  - v. The estimated total duration of the incident, i.e., the total length of time that the affected operations ran without established control measures and the estimated amount of coal handled during the incident.

- vi. A discussion of the probable cause of the incident and any preventative measures taken.
- vii. A discussion whether any applicable emission standards, as listed in Condition 7.4.4, may have been violated during the incident, with supporting explanation.
- f. The Permittee shall maintain records for all opacity measurements made in accordance with Reference Method 9 for the affected operations that it conducts or that are conducted on its behalf by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements if conducted pursuant to Condition 7.4.7(a), or otherwise the identity of the observer, a description of the measurements that were made, the operating condition of the affected operations, the observed opacity, and copies of the raw data sheets for the measurements.

#### 7.4.10 Reporting Requirements

##### a. Reporting of Deviations

For the affected operations, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any corrective actions taken and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act:

- i. The Permittee shall provide the following notifications and reports to the Illinois EPA concerning incidents when operation continued with excess emissions, including continued operation during malfunction or breakdown of equipment.
  - A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity from an affected operation exceeds or may have exceeded the applicable opacity standard for eight or more 6-minute averaging periods. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds or may have exceeded the applicable standard for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.4.10(a)(iii).)
  - B. Upon conclusion of each such incident for which notification is required, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed description

of the incident and its cause(s), an explanation why continued operation of an affected operation was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected operation was taken out of service.

- ii. Notification within 30 days for operation of an affected operation that did not fulfill the applicable requirements in Conditions 7.4.6(a) that continued for more than 12 operating hours from the time that it was identified. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.4.9(e).
- iii. A. Notification with the quarterly reports required by Conditions 7.1.10-2(a), 7.2.10-2(a) and 7.3.10-2(a) for other deviations not addressed by Conditions 7.4.10(a)(i) and (ii), including deviations from applicable emission standards, inspection and recordkeeping requirements.
  - B. With this report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.

#### 7.4.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected operations without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (1) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Handling of solid fuels other than coal.
- b. Operation of additional dust suppressant systems.
- c. Operation of additional dust collection equipment.
- d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling PM emissions than the device(s) being replaced, as recognized in a Construction Permit for such system or equipment.

7.4.12 Compliance Procedures

- a. Compliance with Condition 7.4.4 is addressed by the control, testing, inspection, and recordkeeping required by Conditions 7.4.6(a), 7.4.7(a), 7.4.8, and 7.4.9, respectively.
- b. Compliance with Condition 7.4.6(a) is addressed by the testing, inspection, and recordkeeping required by Conditions 7.4.7, 7.4.8, and 7.4.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7) (p) (v) of the Act.

7.5 Existing Coal Processing Equipment

7.5.1 Description

The Permittee prepares or processes coal for use as fuel in Boilers 31, 32 and 33 with crushers that reduce the size of the coal. Associated particulate matter (PM) emissions are controlled by various control measures including moisture content of the coal, enclosures, and covers.

Note: The description in Condition 7.5.1 is for informational purposes only and implies no limits or constraints

7.5.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Crusher 1 CR2	Coal Crushing Operation	Enclosures and Covers

7.5.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions, is an individual process emission unit as described in Conditions 7.5.1 and 7.5.2.

7.5.4 Applicable Emission Standards

- a. The affected processes shall comply with the standard in Condition 5.2.2(a), which generally addresses visible emissions of fugitive particulate matter, as defined by 35 IAC 211.2490, from the affected processes, pursuant to 35 IAC 212.301.
- b. The affected processes shall comply with the 30 percent opacity standard, pursuant to 35 IAC 212.123(a), which generally requires that the emission of smoke or other particulate matter from the affected operations shall not exhibit an opacity greater than 30 percent, into the atmosphere, except as allowed by 35 IAC 212.123(b) and 212.124.
- c. The affected processes shall comply with 35 IAC 212.321(a), which provides that:
 

No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c) (See also Attachment 1 to this permit) [35 IAC 212.321].
- d. i. The affected processes are subject to the NSPS for Coal Preparation Plants, 40 CFR 60 Subparts A and Y, because the affected processes commenced construction

or modification after October 24, 1974, and on or before April 28, 2008. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

- ii. The affected processes shall not exhibit 20 percent opacity or greater into the atmosphere, pursuant to the NSPS, 40 CFR 60.252(b) except during periods of startups, shutdowns, and malfunction, pursuant to 40 CFR 60.11(c)

#### 7.5.5 Non-Applicability of Regulations of Concern

- a. The affected processes are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected processes do not use an add-on control device to achieve compliance with an emission limitation or standard.

#### 7.5.6 Work Practices, Operational and Production Limits, and Emission Limitations

- a. i. The Permittee shall implement and maintain those control measures for the affected processes that are established, to minimize visible emissions of particulate matter and provide assurance of compliance with the applicable emission standards in Conditions 7.5.4 pursuant to Section 39.5(7) (a) of the Act. "Established" control measures may include enclosure and natural surface moisture.
- ii. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the affected process in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].

#### 7.5.7 Opacity and Emission Testing Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to 40 CFR 60, Subpart Y and Section 39.5(7) (d) of the Act.
  - A. The testing of fugitive emissions of the affected process shall be conducted at least annually.
  - B. Upon written request by the Illinois EPA, such testing shall be conducted for specific affected

process(es) within 45 calendar days of the request or on the date agreed upon by the Illinois EPA, whichever is later.

- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 10.0 percent.
- iii.
  - A. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).
  - B. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:
  - A. Date and time of testing.
  - B. Name and employer of qualified observer.
  - C. Copy of current certification.
  - D. Description of observation condition, including recent weather.
  - E. Description of the operating conditions of the affected processes.
  - F. Raw data.
  - G. Opacity determinations.
  - H. Conclusions.

#### 7.5.8 Inspection Requirements

- a. The Permittee shall perform inspections of each affected process on at least a monthly basis, to confirm compliance with the requirements of Condition 7.5.6(a). These inspections shall be certified by supervisory or management personnel [Sections 39.5(7)(a) and (d) of the Act].

7.5.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected process, pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee shall keep the following records:
  - i. The following information for the affected processes, with supporting information, which shall be kept up to date:
    - A. The maximum operating capacity of each element of the affected process, (tons/hr).
  - ii. Operating record(s) for the affected process, which shall include information for any incident in which the operation of the process continued during malfunction, breakdown, or without the established control measures:
    - A. Date, time, and duration of the incident;
    - B. Identification of the affected processes involved;
    - C. The estimated amount of coal processed during the incident;
    - D. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel;
    - E. A description of the incident;
    - F. Whether emissions exceeded or may have exceeded any applicable standard;
    - G. A description of the corrective actions taken to reduce emissions;
    - H. The duration of the incident;
    - I. A discussion of the probable cause(s) and a description of the preventative actions taken; and
    - J. For operation without established control measures, the following additional information should be provided:
      - I. The length of time after the incident was identified that the affected process(es) continued to operate before established control measures were in place or the operations were shutdown (to resume operation only after established control measures were in place) and, if this time was more than one hour, an explanation why

this time was not shorter, including a description of any mitigation measures that were implemented during the incident;

- II. The established control measures that were not present or implemented;
- III. The established control measures that were present, if any; and
- IV. Other control measures or mitigation measures that were implemented, if any.

iii. Maintenance and repair record(s) for the processes, including each item of air pollution control measure, i.e., each dust suppressant application system associated with the process, which lists the date and nature of maintenance and repair activities performed. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

b. i. The Permittee shall maintain a record, which shall be kept up to date, of the established control measures for the affected process pursuant to Condition 7.5.6(a).

ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the above established control measures are sufficient to assure compliance with Condition 7.5.4(c) at the maximum process weight rate at which each affected process can be operated (tons coal/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. Except as addressed by Condition 7.5.7(a), this demonstration shall be developed using emission factors for uncontrolled PM emissions, efficiency of control measures, and controlled PM emissions published by USEPA.

iii. Copies of these records shall be submitted to the Illinois EPA within 60 days of the date of issuance of this permit.

iv. Any subsequent revisions to this record shall be submitted within 30 days of the date of the revision.

c. The Permittee shall maintain records of the following for the inspections required by Condition 7.5.8:

i. For inspections required by Condition 7.5.8(a):

A. Date and time the inspection was performed, name(s) of inspection personnel, and specific process(es) inspected.

- B. The observed condition of the established control measures for the inspected process(es).
  - C. A description of any maintenance or repair associated with established control measures that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.
  - D. A summary of the observed implementation or status of actual control measures, as compared to the established control measures.
- d. The Permittee shall keep records for all opacity measurements made in accordance with Reference Method 9 for the affected processes that it conducts or that are conducted on its behalf by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements if conducted pursuant to Condition 7.5.7(a), or otherwise the identity of the observer, a description of the measurements that were made, the operating condition of the affected process, the observed opacity, and copies of the raw data sheets for the measurements.

#### 7.5.10 Reporting Requirements

##### a. Reporting of Deviations

For the affected processes, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any corrective actions taken and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act:

- i. The Permittee shall provide the following notifications and reports to the Illinois EPA concerning incidents when operation continued with excess emissions, including continued operation of an affected process during malfunction or breakdown of equipment.
  - A. The Permittee shall notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity from an affected process exceeds or may have exceeded 30 percent for eight or more 6-minute averaging periods. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds or may have exceeded 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in the

quarterly report, in accordance with Condition 7.5.10(a)(iii).)

- B. Upon conclusion of each such incident for which notification is required, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed explanation of the event, an explanation why continued operation was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected process was taken out of service.
- ii. Notification within 30 days for operation of an affected process that was not in compliance with applicable requirements in Conditions 7.5.6(a) that continued for more than 12 operating hours from the time that it was identified. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.5.9(a)(ii).
  - iii. A. Notification with the quarterly reports required by Conditions 7.1.10-2(a), 7.2.10-2(a) and 7.3.10-2(a) for other deviations not addressed by Conditions 7.5.10(a)(i) and (ii), including deviations from applicable emission standards, inspection and recordkeeping requirements.
  - B. With the quarterly report, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.

#### 7.5.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (1) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Handling of solid fuels other than coal.
- b. Operation of additional dust suppressant systems.
- c. Operation of additional dust collection equipment.

- d. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling PM emissions than the device(s) being replaced as recognized in a Construction Permit for such system or equipment.

7.5.12 Compliance Procedures

- a. Compliance with Condition 7.5.4 is addressed by the control, testing, inspection, and recordkeeping required by Conditions 7.5.6(a), 7.5.7(a), 7.5.8, and 7.5.9, respectively.
- b. Compliance with Condition 7.5.6(a) is addressed by testing, inspection, and recordkeeping required by Conditions 7.5.7, 7.5.8, and 7.5.9, respectively.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.6 Existing Limestone and Gypsum Handling Equipment

7.6.1 Description

The Permittee handles bulk limestone and gypsum involved in the operation of the two flue gas desulfurization (FGD) scrubbers for Boilers 31, 32 and 33. The equipment to handle these materials was installed when the first SO<sub>2</sub> scrubber was installed, on Dallman Boiler 33. The limestone is a raw material for the scrubbers, which control SO<sub>2</sub> emissions by reacting the SO<sub>2</sub> emissions with a limestone slurry. Gypsum (CaSO<sub>4</sub>) is the final product of this reaction and is stockpiled at the source, as there is some market for this by-product material.

Particulate matter (PM) emissions associated with these operations are controlled by various control measures including moisture content of the limestone and gypsum, enclosures, and covers.

Note: The description in Condition 7.6.1 is for informational purposes only and implies no limits or constraints

7.6.2 List of Emission Units and Air Pollution Control Equipment

Operation	Control Measures
Limestone Conveyors	Enclosures and Covers
Limestone Piles	
Limestone Unloading	
Gypsum Conveyors	
Gypsum Piles	

7.6.3 Applicability Provisions

- a. The "affected operations" for the purpose of these unit-specific conditions are the emission units described in Condition 7.6.1 and 7.6.2.

7.6.4 Applicable Emission Standards

- a. The affected operations shall comply with the standard in Condition 5.2.2(a), which addresses visible emissions of fugitive particulate matter, as defined by 35 IAC 211.2490, from the affected operations, pursuant to 35 IAC 212.301.
- b. The affected operations shall comply with the standard, i.e. 30 percent opacity, in Condition 5.2.2(b), which addresses the opacity of the emission of smoke or other particulate matter from the affected operations, pursuant to 35 IAC 212.123.
- c. The affected operations are subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new operations emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the

allowable emission rates specified in 35 IAC 212.321(c). (See also Attachment 1.) [35 IAC 212.321]

7.6.5 Non-Applicability of Regulations of Concern

- a. The affected operations are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for PM because the affected operations do not have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

7.6.6 Work Practices, Operational and Production Limits, and Emission Limitations

The Permittee shall implement and maintain those control measures for the affected operations that are established, to minimize visible emissions of particulate matter and provide assurance of compliance with the applicable emission standards in Condition 7.6.4, pursuant to Section 39.5(7)(a) of the Act. "Established" control measures include enclosure, natural surface moisture, and application of dust suppressant.

7.6.7 Opacity and Emission Testing Requirements

- a. i. The Permittee shall have the opacity of the emissions from the affected operations during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
  - A. The testing of fugitive emissions of the affected operation shall be conducted at least annually.
  - B. Upon written request by the Illinois EPA, such testing shall be conducted for specific affected operations within 45 calendar days of the request or on the date agreed upon by the Illinois EPA, whichever is later.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 10.0 percent.
- iii. A. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).
  - B. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.

- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:
  - A. Date and time of testing.
  - B. Name and employer of qualified observer.
  - C. Copy of current certification.
  - D. Description of observation condition, including recent weather.
  - E. Description of the operating conditions of the affected processes.
  - F. Raw data.
  - G. Opacity determinations.
  - H. Conclusions.

#### 7.6.8 Inspection Requirements

- a. The Permittee shall perform inspections of the affected operations on at least a monthly basis, while the affected operations are in use, to confirm compliance with the requirements of Condition 7.6.6(a). These inspections shall be certified by supervisory or management personnel [Sections 39.5(7) (a) and (d) of the Act].
- b. As part of the inspections of Condition 7.6.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with Reference Method 22 to confirm compliance with the requirements of Condition 7.6.4(b). These observations from the affected processes that are in routine service shall be observed at least once during each calendar year. If visible emissions are observed, the Permittee shall take corrective action within 2 hours to return the status of the operations to no visible emission or observations of opacity by Reference Method 9 shall be conducted within one week as required in Condition 7.6.7(a) [Sections 39.5(7) (a) and (d) of the Act].

#### 7.6.9 Recordkeeping Requirements

The Permittee shall maintain the following records for the affected operations, pursuant to Sections 39.5(7) (a) and (e) of the Act:

- a. The Permittee shall keep the following file(s) and records:

- i. File(s) containing the following information for the affected operations, with supporting information, which shall be kept up to date:
  - A. The maximum operating capacity of each affected operation (tons/hr).
  - B. The aggregate capacity of the grinding equipment (ball mills) associated with the affected limestone operations.
- ii. Operating records for the affected operations, which shall include information for any incident in which operation continued during malfunction, breakdown, or without established controls:
  - A. Date, time, and duration of the incident;
  - B. A description of the incident;
  - C. Identification of the affected processes involved;
  - D. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel;
  - E. Whether emissions exceeded or may have exceeded any applicable standard;
  - F. A description of the corrective actions taken to reduce emissions;
  - G. The duration of the incident;
  - H. A discussion of the probable cause(s) and a description of the preventative actions taken;
  - I. For operation without established control measures, the following additional information should be provided:
    - I. The length of time after the incident was identified that the affected process(es) continued to operate before established control measures were in place or the operations were shutdown (to resume operation only after established control measures were in place) and, if this time was more than one hour, an explanation why this time was not shorter, including a description of any mitigation measures that were implemented during the incident;
    - II. The established control measures that were not present or implemented; and

III. The established control measures that were present, if any.

- iii. Maintenance and repair records for the affected operations, including each item of air pollution control measure, i.e., each dust suppressant application system associated with the operations, which lists the date and nature of maintenance and repair activities performed. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- b.
  - i. The Permittee shall maintain a record, which shall be kept up to date, of the established control measures for each of the affected operations pursuant to Condition 7.6.6(a).
  - ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the above established control measures are sufficient to assure compliance with Condition 7.6.4(c) at the maximum process weight rate at which each affected operation can be operated (tons/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. Except as addressed by Condition 7.6.9(a) (i) or testing of an affected operations is conducted in accordance with Condition 7.6.7, this demonstration shall developed using emission factors for uncontrolled PM emissions, efficiency of control measures, and controlled PM emissions published by USEPA.
  - iii. Copies of these records shall be submitted to the Illinois EPA within 60 days of the date of issuance of this permit.
  - iv. Any subsequent revisions to this record shall be submitted within 30 days of the date of the revision.
- c. The Permittee shall maintain records of the following for the inspections required by Condition 7.6.8, for each affected operation:
  - i. For inspections required by Condition 7.6.8(a):
    - A. Date and time the inspection was performed, name(s) of inspection personnel, and identity of the affected operations that were inspected.
    - B. The observed condition of the control measures for the affected operations, including the presence of any visible emissions.
    - C. A description of any maintenance or repair associated with established control measures that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous

inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.

- d. The Permittee shall keep records for all opacity measurements made in accordance with Reference Method 9 for the affected operations that it conducts or that are conducted on its behalf by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements if conducted pursuant to Condition 7.6.7(a), or otherwise the identity of the observer, a description of the measurements that were made, the operating condition of the affected operation(s), the observed opacity, and copies of the raw data sheets for the measurements.

#### 7.6.10 Reporting Requirements

##### a. Reporting of Deviations

For the affected operations, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. Such notifications shall include a description of each deviation and a discussion of the probable cause of such deviation, any corrective actions taken and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act:

- i. The Permittee shall provide the following notifications and reports to the Illinois EPA concerning incidents when operation continued with excess emissions, including continued operation of an affected operation during malfunction or breakdown of equipment.
  - A. The Permittee shall notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity from an affected operation exceeds or may have exceeded 30 percent for eight or more 6-minute averaging periods. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds or may have exceeded 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in accordance with Condition 7.6.10(a)(iii).)
  - B. Upon conclusion of each such incident for which notification is required, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed explanation of the incident, an explanation why continued operation was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed

or when the affected operation was taken out of service.

- ii. Notification within 30 days for operation of an affected operation that was not in compliance with applicable requirements in Conditions 7.6.6(a) that continued for more than 12 operating hours from the time that it was identified. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.6.9(a) (ii).
- iii. A. Notification with the quarterly reports required for the coal fired Boiler 33 by Condition 7.2.10-2(a) for other deviations not addressed by Conditions 7.6.10(a) (i) and (ii), including deviations from the applicable PM emission standard, inspection requirements, and recordkeeping requirements.
  - B. With these reports, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.

#### 7.6.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected operations without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7) (a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

- a. Operation of additional dust suppressant systems.
- b. Operation of additional dust collection equipment.
- c. Operation of replacement dust suppression systems or dust collection equipment that is of equal or greater effectiveness in controlling PM emissions than the device(s) being replaced.

#### 7.6.12 Compliance Procedures

- a. Compliance with Condition 7.6.4 is addressed by the control, testing, inspection, and recordkeeping required by Conditions 7.6.6(a), 7.6.7, 7.6.8, and 7.6.9, respectively.
- b. Compliance with Condition 7.6.6(a) is addressed by the inspection, and recordkeeping required by Conditions 7.6.8, and 7.6.9, respectively.

Note: This condition is included in this permit pursuant to  
Section 39.5(7)(p)(v) of the Act.

7.7 New and Modified Bulk Material Handling, Processing and Storage Operations Associated with Dallman Boiler 4

7.7.1 Description

The affected units for the purpose of these unit-specific conditions are equipment and facilities handling coal and other bulk materials that are involved with the operation of Dallman Boiler 4 and that have the potential for particulate matter (PM) emissions. In addition to the coal fuel for this boiler, limestone is received, handled, put through enclosed ball mills and stored as a raw material for the scrubber on this boiler. Bottom ash, fly ash and gypsum, which are by-products of this boiler, baghouse and scrubber, are also handled, stored and loaded out by truck.

PM emissions associated with the affected 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 enclosure and covers, application of water and dust suppressants, and dust collection devices.

The affected units were constructed or modified as part of the Dallman 4 Project, as addressed by Construction Permit/PSD Approval 04110050.

Note: The description in Condition 7.7.1 is for informational purposes only and implies no limits or constraints

7.7.2 List of Emission Units and Air Pollution Control Measures

For the purpose of these unit-specific conditions, the "affected units" are the emission units identified below, as generally described in Conditions 7.7.1.

Emission Units	Emission Control Measures
Receiving, Processing, Transfer and Storage Operations for Bulk Material (coal, limestone, flyash, and gypsum) Associated with Boiler 4	Enclosure, Covers, Dust Suppressant Application System and Control Devices

7.7.3-1 Best Available Control Technology (BACT) Requirements

- a. For a affected units handling a wet material [T1] [BACT]:
  - i. PM emissions from shall be controlled by:
    - A. Maintaining the material with adequate moisture to prevent visible emissions directly from such unit during the handling, storage or load out of the material.
    - B. Collection of spilled material that could become airborne if it dried or were subject to vehicle

traffic as part of the Program for Control of Fugitive Dust required by Section 7.12.

- ii. For this purpose, a wet material is a material that has sufficient moisture during normal operation to minimize the potential for direct emissions, including bottom ash from Boiler 4, which will be collected in a water bath at the bottom of the boiler, gypsum from the scrubber on the boiler, which will be produced by mechanical dewatering of scrubber sludge, and other similar materials with high levels of moisture.
- c. For an affected unit handling a dry material, other than an existing receiving facility for dry material or a storage pile for dry material and handling operations associated with the storage pile, PM emissions shall be controlled by [T1] [BACT]:
- i. Enclosure of the unit so as to prevent visible fugitive emissions, as defined by 40 CFR 60.671, from the affected unit.
  - ii. Aspiration to a control device designed to emit no more than 0.01 grains/dry standard cubic foot (gr/dscf), which device shall be operated in accordance with good air pollution control practice to minimize emissions. For this purpose, the control device shall be a baghouse or other filtration type device unless the Permittee demonstrates and the Illinois EPA concurs that another type of control device is preferable due to considerations of operational safety.
- d. For storage piles [T1] [BACT]:
- i. Storage piles shall not be used for storage of fly ash unless the ash has been thoroughly mixed with water so as to effectively eliminate the potential for fugitive emissions.
  - ii. PM emissions from storage piles for dry material, including material handling operations associated with the piles, shall be controlled by application of water or other dust suppressants so as to minimize fugitive emissions to the extent practicable. For this purpose, there shall either:
    - A. Be no visible emissions from the affected unit, as determined in accordance with Reference Method 22, or
    - B. A nominal control efficiency shall be achieved from the uncontrolled emission rate, as follows, as determined using appropriate USEPA emission factors for particulate emissions from handling of a material dry, in the absence of any control of emissions, and engineering analysis and

calculations for the control measures that are actually present: 1) Coal: 90 percent; and 2) Limestone: 99 percent.

- e. PM emissions from an existing receiving facility for dry material that is used to receive a material for Boiler 4 shall be controlled by: [T1][BACT]
  - i. Enclosure of the unit and other practices to control PM emissions from the unit such that the opacity of PM emissions does not exceed 10 percent.
  - ii. Compliance with the requirements of Condition 7.7.5(c)(ii) for any control device that is used to control PM emissions from the unit, if a control device is used.

7.7.3-2 Applicable Federal Emission Standards

- a. Affected units engaged in handling limestone that are "affected facilities" for purposes of the NSPS for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subpart 000 shall comply with applicable requirements of 40 CFR 60 Subpart 000 and related provisions of 40 CFR 60 Subpart A. The affected facilities for purposes of this NSPS, as specified in 40 CFR 60.670(a), include crushers, grinding mills, screening operations, bucket elevators, belt conveyors, storage bins, and enclosed truck loading stations:
  - i. Pursuant to the NSPS, 40 CFR 60.672(a), stack emissions of PM from affected facilities are subject to the following limitations:
    - A. The rate of emissions shall not exceed 0.05 gram/dscm (0.02 gr/dscf).
    - B. The opacity of emissions shall not exceed 7 percent.\*
      - \* This limit would not apply if emissions were to be controlled by a wet scrubber.
  - ii. Pursuant to the NSPS, 40 CFR 60.672(b), (c) and (d), fugitive emissions of PM from affected facilities are subject to the following limits:
    - A. The opacity of emissions from any transfer point on a belt conveyor or any other affected facility shall not exceed 10 percent, provided however that this limit would not apply to the opacity of emissions from truck dumping into a screening operation, feed hopper, or crusher, if material were to be dumped directly into an affected facility by truck.
    - B. Notwithstanding the above, the opacity of fugitive emissions from any crusher for which a capture system is not used, other than emissions

from truck dumping into the unit, shall not exceed 15 percent.

- iii. Pursuant to the NSPS, 40 CFR 60.672(e), if an affected facility is enclosed in a building, the facility is subject to applicable limits above or the building is subject to the following limits:
  - A. There shall be no visible fugitive emissions from the building except emissions from a vent as defined in 40 CFR 60.671.
  - B. Emissions from each vent from the building shall comply with the applicable limits for stack emissions, as set forth in Condition 7.7.3-2(a)(i).
- b. Affected units engaged in handling and processing coal shall comply with applicable requirements of the NSPS for Coal Preparation Plants, 40 CFR 60 Subpart Y, and related provisions of 40 CFR 60 Subpart A.

Pursuant to the NSPS, 40 CFR 60.252(b), the opacity of the exhaust from coal processing and conveying equipment, coal storage systems (other than open storage piles), and coal loading systems shall not exceed 20 percent.

- c. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the affected facilities and units that are subject to an NSPS in a manner consistent with good air pollution control practice for minimizing emissions.

#### 7.7.3-3 Applicable State Emission Standards

- a. Pursuant to 35 IAC 212.109 and 212.123(a), the emission of smoke or other PM from affected units shall not have an opacity greater than 30 percent, except as allowed by 35 IAC 212.124. Compliance with this limit shall be determined by 6-minute averages of opacity measurements in accordance with Reference Method 9.
- b. With respect to emissions of fugitive PM, affected units shall comply with 35 IAC 212.301, which provides that emissions of fugitive PM shall not be visible from any process, including any material handling or storage activity, when looking generally toward the zenith at a point beyond the property line of the source, except when the wind speed exceeds 25 miles per hour, as provided by 35 IAC 212.314.
- c. The emissions of PM from affected units other than units excluded by 35 IAC 212.323 (refer to Condition 7.7.4(b)) shall comply with the applicable limit pursuant to 35 IAC 212.321, which rule limits emissions based on the process weight rate of emission units and allows a minimum emission rate of 0.55 lb/hour for any individual unit.

7.7.4 Non-Applicability Provisions

- a. This permit is issued based on the affected units that handle gypsum not being subject to the NSPS, 40 CFR 60 Subpart 000 because the Permittee does not crush or grind gypsum, so that the Permittee does not operate a nonmetallic mineral processing plant, as defined by 40 CFR 60.671, for gypsum.
- b. This permit is issued based on the storage piles and associated operations and the coal handling operations associated with Boiler 4 not being subject to 35 IAC 212.321 pursuant to 35 IAC 212.323, which provides that 35 IAC 212.321 shall not apply to emission units, such as stock piles, to which, because of the disperse nature of such emission units, such rules cannot reasonably be applied.
- c. The affected units are not subject to 40 CFR Part 64, CAM, because the PM emissions of the controlled units do not meet the applicability criteria in 40 CFR 64.2(a)(3) and other units do not use an add-on control device so do not meet the criteria in 40 CFR 64.2(a)(3).

7.7.5 Work Practice Requirements

- a.
  - i. The Permittee shall implement and maintain control measures for the affected units (such as enclosure, natural surface moisture, application of dust suppressant, and use of dust collection devices), to minimize visible emissions of particulate matter and provide assurance of compliance with the applicable emission standards and requirements in Conditions 7.7.3-1, 7.7.3-2, and 7.7.3-3, pursuant to Section 39.5(7)(a) of the Act [T1].
  - ii. The Permittee shall implement and maintain the control measures for the affected units provide assurance of compliance with the applicable emission limits in Conditions 7.6(a), pursuant to Section 39.5(7)(a) of the Act.
  - iii. Pursuant to Section 39.5(7)(a) of the Act, for the purpose of Conditions 7.7.5(i) and (ii), the Permittee shall operate and maintain each affected unit with the control measures that it identifies in the records required by Condition 7.7.9(b), which measures shall be referred to as "established control measures" for the affected units. These established control measures may include enclosure, natural surface moisture, application of dust suppressant and use of dust collection devices, and provide for different control measures depending upon circumstances.
- b.
  - i. Bulk materials other than coal, associated with the operation of Boiler 4 that have the potential for PM emissions\*, shall be stored in silos, bins, and buildings, without storage of such materials in outdoor piles except on a temporary basis during

breakdown or other disruption in the capabilities of the enclosed storage facilities [T1].

\* PM emissions associated with certain affected units that handle material that is wet, such as bottom ash and gypsum, will be minimized because the material is wet.

ii. Outdoor storage piles for a dry material associated with Boiler 4 shall be equipped and operated with adjustable stacker(s), rotary stacker(s), ladders or other comparable devices to minimize the distance that material drops when added to the pile and minimize the associated PM emissions [T1].

#### 7.7.6 Emission Limitations

a. Annual PM emissions from the affected units shall not exceed the limits in the table below. Compliance with these emission limits shall be determined from a rolling total of 12 months of emission data, calculated from the material handled for Boiler 4, operating information for affected units, and appropriate emission factors for the affected units, i.e., emission factors based on representative emission testing conducted for the units or other similar units at the facility or, otherwise, emissions factors developed and published by USEPA or other nationally recognized organization [T1].

Operation	Emission Limitations (Tons/Year)
Coal Handling	4.42
Limestone Handling	0.16
Gypsum Handling	0.40
Ash Handling	2.45
Storage Piles*	4.22
Total	11.80

\* The limitation for storage piles addresses pile maintenance and wind erosion from the various storage piles.

b. The hourly PM emissions from affected units that handle ash shall not exceed 0.559 pounds/hour.

#### 7.7.7 Testing Requirements

a. i. The Permittee shall have the opacity of the emissions of the affected units during representative weather and operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below.

A. If emissions are normally visible from a unit when it is in operation, as determined by Reference Method 22, opacity testing shall be conducted at least annually.

- B. Upon written request by the Illinois EPA, such testing shall be conducted for specific affected units within 45 calendar days of the request or on the date agreed upon by the Illinois EPA, whichever is later.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 5.0 percent.
- iii. A. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).  
B. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:
  - A. Date and time of testing.
  - B. Name and employer of qualified observer.
  - C. Copy of current certification.
  - D. Description of observation conditions, including recent weather.
  - E. Description of the operating conditions of the affected processes.
  - F. Raw data.
  - G. Opacity determinations.
  - H. Conclusions.

Note: For the affected units that are subject to the NSPS, 40 CFR 60 Subpart 000, this permit does not address the initial performance testing required by this NSPS, as this testing has been conducted. In this regard, the applicable requirements for initial performance testing under the NSPS were addressed in a site-specific determination by USEPA. (USEPA Region 5, Air Enforcement Section, Alternative Testing for NSPS 000, April 29, 2009).

- b. i. Within 90 days of a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of affected units, as specified in such request, measured during representative operating conditions, as set forth below.
- ii. A. Testing shall be conducted using appropriate Reference Methods, including Reference Method 5 or 17 for PM emissions.  
B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.
- iii. The Permittee shall submit a test plan to the Illinois EPA at least 60 days prior to testing, which plan shall include the information for test plans specified by General Condition 8.6.2 of the source's CAAPP permit.
- iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.
- v. The Permittee shall expeditiously submit Final Report(s) for required emission testing to the Illinois EPA, within 45 days after the test results are compiled but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:
  - A. A summary of results.
  - B. Detailed description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
  - C. Detailed description of the operating conditions of the affected process during testing, including operating rate (tons/hr) and the control measures being used.
  - D. Detailed data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

E. Representative opacity data (6-minute average) measured during testing.

7.7.8 Instrumentation Requirements

- a. The Permittee shall install, operate and maintain instrumentation to measure the pressure drop across each baghouse used to control affected units, other than bin vent filters and other similar filtration devices and record the measured pressure drop at least every six weeks [T1].

7.7.9 Inspection Requirements

- a.
  - i. The Permittee shall conduct inspections of affected units on at least a monthly basis with personnel who are not directly responsible for the day-to-day operation of these units, for the specific purpose of verifying that the measures identified in the operating program and other measures required to control emissions from affected units are being properly implemented.
  - ii. These inspections shall include observation for the presence of visible emissions, performed in accordance with Reference Method 22, from buildings in which affected units are located and from units from which the Permittee has elected to demonstrate no visible emissions.
- b. The Permittee shall perform detailed inspections of the dust collection equipment for affected units while the units are out of service, with an initial inspection performed before any maintenance and repair activities are conducted during the period the unit is out of service and a follow-up inspection performed after any such activities are completed. These inspections shall be conducted at least every 15 months, except for control devices for units handling dry fly ash. Units handling dry fly ash shall be inspected at least every 9 months or, if Boiler has operated without a scheduled outage for more than 9 months since the previous inspection, during the next scheduled outage of the boiler or during any unscheduled outage of Boiler 4 that extends for more than 143 hours, whichever occurs first.

7.7.10 Recordkeeping Requirements

In addition to the records required by Condition 5.4, the Permittee shall maintain records of the following items for the affected units, pursuant to Section 39.5(7) (b) of the Act:

- a. For affected units that are subject to NSPS, the Permittee shall fulfill applicable recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.676 (applicable to units handling limestone).
- b.
  - i. The Permittee shall maintain a record, which shall be kept up to date, with a detailed description of the work practices and other measures used for PM

emissions that constitute the established control measures for each affected unit, as required by with Condition 7.7.6(a) (iii). This record is referred to as the "Control Measures Record" for the affected units and will be incorporated into the permit as provided by Condition 5.2.7.

- ii. A copy of this record shall be submitted to the Illinois EPA within 60 days of the date of issuance of this permit.
  - iii. A copy of any subsequent revision to this record shall be submitted to the Illinois EPA within 30 days of the date of the revision.
- c. The Permittee shall maintain file(s) for the affected units, which shall be kept current, that contain:
- i. The maximum operating capacity of each affected unit or group of related units (tons/hour).
  - ii. A. For the baghouses and other filter devices associated with affected units, design specifications for each device (type of unit, maximum design exhaust flow (acfm and scfm), filter area, type of filter cleaning, performance guarantee for particulate exhaust loading in gr/scf, etc.), the manufacturer's recommended operating and maintenance procedures for the device, and design specification for the filter material in each device (type of material, surface treatment(s) applied to material, weight, performance guarantee, warranty provisions, etc.).  
  
B. For each baghouse, the normal range of pressure drop across the device and the minimum and maximum safe pressure drop for the device, with supporting documentation.
  - iii. The designated PM emission rate, in pounds/hour and tons/year, from affected units, either individually or grouped by related units, with supporting calculations and documentation, including detailed documentation for the level of emissions control achieved through the work practices that are used to control PM emissions. For each category of affected unit (e.g., coal handling), the sum of these emission rates shall not exceed the totals in Condition 7.7.6(a) for the category of affected unit. For ash handling, the sum of the hourly emission rates shall not exceed the limit In Condition 7.7.6(b).
  - iv. A demonstration that confirms that the established control measures described in the record pursuant to Condition 7.7.10(b) are sufficient to assure compliance with the above emissions rates and, for units to which it applies, Condition 7.7.3-3(c), at

the maximum process weight rate at which each affected unit can be operated (tons/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. Except as addressed by Condition 7.7.10(b) (ii) or testing of PM emissions from an affected unit is conducted in accordance with Condition 7.7.7, this demonstration shall be developed using emission factors for uncontrolled PM emissions, efficiency of control measures, and controlled PM emissions published by USEPA.

- d. The Permittee shall keep records for the amount of bulk materials associated with the operation of the Boiler 4 received by or loaded out from the source by category or type of material (tons/month).
- e.
  - i. The Permittee shall keep inspection and maintenance log(s) or other records for the control measures associated with the affected units, including buildings and enclosures, dust suppression systems and control devices.
  - ii. These records shall include the following information for the inspections required by Condition 7.7.9. These records shall be signed off by supervisory or management personnel, which shall mean that the person signing off has reviewed the records, believes that the records appear to be complete, and is not aware of any facts that contradict the information in the records:
    - A. Date and time the inspection was performed and name(s) of inspection personnel.
    - B. The observed condition of the control measures and/or control device for the affected unit, including the presence of any visible emissions.
    - C. A description of any maintenance or repair associated with the established control measures that are recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.
    - D. A summary of the observed implementation or status of actual control measures, as compared to the established control measures.
- f. The Permittee shall maintain records of the following for each incident when any affected unit operated without the control measures identified in the records pursuant to Condition 7.7.9(b):

- i. The date of the incident and identification of the unit(s) that were involved.
  - ii. A description of the incident, including: the established control measures that were not present or implemented; the established control measures that were present, if any; and other control measures or mitigation measures that were implemented, if any.
  - iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.
  - iv. Operational data for the incident, e.g., the measured pressure drop of a baghouse, if the pressure drop of the baghouse, as measured pursuant to Condition 7.7.8, deviated outside the levels set as good air pollution control practices.
  - v. The corrective action(s) taken and the length of time after the incident was identified that the unit(s) continued to operate before established control measures were in place or the operations were shutdown (to resume operation only after established control measures were in place) and, if this time was more than one hour, an explanation why this time was not shorter, including a detailed description of any mitigation measures that were implemented during the incident.
  - vi. The estimated total duration of the incident, i.e., the total length of time that the unit(s) ran without established control measures and the estimated amount of material processed during the incident.
  - vii. A discussion of the probable cause of the incident and any preventative measures taken.
  - viii. An estimate of any additional emissions of PM (pounds) above the PM emissions associated with normal operation that resulted from the incident, if any, with supporting calculations.
  - ix. A discussion whether any applicable emission standards, emission limitations or requirements as listed in Condition 7.7.3-1, 7.7.3-2, 7.7.3-3, 7.7.5 or 7.7.6 or any applicable emission rate, as identified in the records pursuant to Condition 7.7.10(c) (iii), may have been violated during the incident, with an estimate of the amount of any excess PM emissions (pounds) and supporting explanation.
- g. The Permittee shall maintain the following records for the emissions of the affected units:

- i. A file containing the standard emission factors used by the Permittee to determine PM emissions from the units, with supporting documentation.
  - ii. Records of PM emissions based on operating data for the unit(s) and appropriate emission factors, with supporting documentation and calculations.
- h. The Permittee shall keep records for all opacity measurements made in accordance with Reference Method 9 for affected units that it conducts or that are conducted at its behest by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements if conducted pursuant to Conditions 7.7.7(a) or 7.7.7(b), or otherwise the identity of the observer, a description of the measurements that were made, the operating condition of the affected unit, the observed opacity, and copies of the raw data sheets for the measurements.

#### 7.7.11 Reporting Requirements

##### a. Reporting of Deviations

Pursuant to Section 39.5(7)(f)(ii) of the Act, the Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected units with the permit requirements as follows. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. The Permittee shall provide notification to Illinois EPA within 30 days of deviations from applicable emission standards or operating requirements for the affected units that continue\* for more than 24 hours. These notifications shall include the recordkeeping requirements specified by Condition 7.7.11(a)(ii)(A).

\* For this purpose, time shall be measured from the start of a particular event. The absence of a deviation for a short period shall not be considered to end the event if the deviation resumes. In such circumstances, the event shall be considered to continue until corrective actions are taken so that the deviation ceases or the Permittee takes the affected unit out of service for repairs.

- ii. A. The Permittee shall provide notification with the quarterly reports to the Illinois EPA for all deviations from emission standards, including standards for visible emissions and opacity, and operating requirements set by this permit. These notifications shall include at least the following information:

- I. The date and time of the event;

- II. A description of the event;
- III. Information on the magnitude of the deviation;
- IV. A description of the corrective measures taken; and
- V. A description of any preventative measures taken to prevent future occurrences.

B. These reports shall also address any deviations from applicable compliance procedures established by this permit for affected units.

7.7.12 Compliance Procedures

- a. Compliance with the emission limitations and requirements of Conditions 7.7.3-1, 7.7.3-2 and 7.7.3-2 is addressed by the work practices requirements in Condition 7.7.5, the testing requirements in Condition 7.7.7, the monitoring requirements in Condition 7.7.8, the inspection requirements of Condition 7.7.9, the records required in Condition 7.7.10, and the reports required in Condition 7.7.11.
- b. Compliance with the work practices requirements in Conditions 7.7.5(a)(i) and (ii) is addressed by the Work Practice requirement in Condition 7.7.5(a)(iii), the monitoring requirements in Condition 7.7.8, the inspection requirements of Condition 7.7.9, the records required in Condition 7.7.10, and the reports required in Condition 7.7.11.
- c. Compliance with the PM emission limitations of Condition 7.7.6(a) is addressed by work practices requirements in Condition 7.7.5(a), the testing requirements in Condition 7.7.7, the monitoring requirements in Condition 7.7.8, the inspection requirements of Condition 7.7.9, the records required in Condition 7.7.10, and the reports required in Condition 7.7.11.

7.8 Cooling Tower

7.8.1 Description

The affected unit for the purpose of this unit-specific condition is a cooling tower associated with the steam cycle for Dallman Boiler 4. The cooling tower is a source of particulate because of mineral material present in the water, which is 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 water droplets entrained in the air exhausted from the cooling tower. This cooling tower was constructed as part of the Dallman 4 Project pursuant to Construction Permit #04110050.

Note: The description in Condition 7.8.1 is for informational purposes only and implies no limits or constraints

7.8.2 List of Emission Units and Air Pollution Control Measure

The "affected cooling tower" for the purpose of these unit-specific conditions, is the cooling tower identified below, as generally described in Condition 7.8.2.

Emission Unit	Description	Emission Control Measure
Cooling Tower	Cooling Tower associated with the steam cycle for Dallman Boiler 4	Drift Eliminators

7.8.3 BACT Requirements and Applicable Emissions Standards

- a. The affected cooling tower shall be equipped, operated, and maintained with drift eliminators designed to limit the loss of water droplets from the unit to not more than 0.0005 percent of the circulating water flow [T1] [BACT].
- b. The PM emissions of the affected cooling tower are subject to the particulate matter limitations in 35 IAC 212.321 which provides that the PM emissions entering into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the PM emissions from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, shall not exceed the allowable emission rates specified in 35 IAC 212.321(c). (See also Attachment 1.)
- c. The affected cooling tower shall comply with the 30 percent opacity standard pursuant to 35 IAC 212.123(a), which generally requires that the emission of smoke or other particulate matter from this cooling tower shall not exhibit an opacity greater than 30 percent, into the atmosphere, except as allowed by 35 IAC 212.123(b) and 212.124.

7.8.4 Non-Applicability Provisions

- a. This permit is issued based on the affected cooling towers not being subject to 40 CFR Part 63, Subpart Q, Industrial

Cooling Towers, because the cooling towers are not operated with chromium-based water treatment chemicals.

- b. The affected cooling tower is not subject to 40 CFR Part 64, CAM, for PM, because the affected cooling tower does not use add-on controls to achieve compliance with any emission limitation or standard.

#### 7.8.5 Operating Requirements and Work Practices

- a. Chromium-based water treatment chemicals, as defined in 40 CFR 63.401, shall not be used in the affected unit [T1].
- b. The Permittee shall equip the affected cooling tower with appropriate features, such as louvered heating coils designed to heat tower plenum air as required, to enable it to be operated without a significant contribution to fogging and icing on offsite roadways during periods when fogging or icing are present in the area or weather conditions are conducive to fogging or icing [T1].
- c. The Permittee shall operate and maintain the affected cooling tower, including the drift eliminators, in a manner consistent with good air pollution control practices for minimizing emissions [T1].
- d. The Permittee shall operate and maintain the affected cooling tower in accordance with written operating procedures, which procedures shall be kept current. These procedures shall address the practices that will be followed as good air pollution control practices and the actions that will be followed to prevent a significant contribution to icing and fogging on offsite roadways [T1].

#### 7.8.6 Emission Limitations

- a. PM emissions from the affected cooling tower shall not exceed 9.64 tons per year. Compliance with this limit shall be determined from a running total of 12 months of data (i.e., from the sum of the data for the current month plus the preceding 11 months [T1].

#### 7.8.7 Testing Requirements

- a. Upon written request by the Illinois EPA, the Permittee shall promptly have the water circulating in the affected cooling tower sampled and analyzed for the presence of hexavalent chromium in accordance with the procedures of 40 CFR 63.404(a) and (b) [T1].

#### 7.8.8 Monitoring Requirements

- a. The Permittee shall sample and analyze the water being circulated in the affected cooling tower on at least a monthly basis for the total dissolved solids content. Measurements of the total dissolved solids content in the wastewater discharge associated with the affected unit, as required by a National Pollution Discharge Elimination System

permit, may be used to satisfy this requirement if the effluent has not been diluted or otherwise treated in a manner that would significantly reduce its total dissolved solids content [T1].

7.8.9 Recordkeeping Requirements

In addition to the records required by Condition 5.4, the Permittee shall maintain records of the following items for the affected cooling tower:

- a. The Permittee shall keep a file for the affected cooling tower that contains the following [T1]:
  - i. The design loss specification for the drift eliminators installed in the affected unit.
  - ii. The suppliers' recommended procedures for inspection and maintenance of the drift eliminators.
  - iii. The operating factors, if any, used to determine the amount of water circulated in the affected cooling tower or the PM emissions from the affected cooling tower, with supporting documentation.
  - iv. Copies of the Material Safety Data Sheets or other comparable information from the suppliers for the various water treatment chemicals that are added to the water circulated in the affected cooling tower.
- b. The Permittee shall keep the following operating records for the affected cooling tower [T1]:
  - i. The amount of water circulated in the affected cooling tower, gallons/month. As an alternative to direct data for water flow, these records may contain other relevant operating data for the cooling tower (e.g., water flow to the unit) from which the amount of water circulated in the cooling tower may be reasonably determined.
  - ii. Each occasion when the Permittee took action to prevent a significant contribution to fogging or icing from the affected cooling tower, including the date and duration, the action or actions that were taken, the weather conditions that triggered such actions, and the weather conditions when such actions were terminated.
- c. The Permittee shall keep inspection and maintenance logs for the drift eliminators installed in the affected cooling tower.
- d. The Permittee shall maintain records for the PM emissions of the affected cooling tower (tons/month and tons/year) based on the above records, the measurements required by Condition 7.8.8, and appropriate USEPA emission estimation methodology, with supporting calculation.

7.8.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected cooling tower with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- i. Emissions of PM from the affected cooling tower in excess of the limits specified in Condition 7.8.6 within 30 days of such occurrence.

7.8.11 Compliance Procedures

- a. Compliance with the BACT and Operating Requirements and Work Practices of Conditions 7.8.3(a) and 7.8.5, respectively, is addressed by the records required in Condition 7.8.9 and the reports required in Condition 7.8.10.
- b. Compliance with the PM emission standard of Condition 7.8.3(b) is addressed by the Control Requirements and Work Practices requirements in Condition 7.8.5, the testing requirements in Condition 7.8.7, the monitoring requirements in Conditions 7.8.8, the records required in Condition 7.8.9, and the reports required in Condition 7.8.10.
- c. Compliance with the opacity standard of Condition 7.8.3(c) is addressed by the Control Requirements and Work Practices requirements in Condition 7.8.5, the testing requirements in Condition 7.8.7, the monitoring requirements in Conditions 7.8.8, the records required in Condition 7.8.9, and the reports required in Condition 7.8.10.
- d. Compliance with the PM emission limitation of Condition 7.8.6 is addressed by the Control Requirements and Work Practices requirements in Condition 7.8.5, the testing requirements in Condition 7.8.7, the monitoring requirements in Conditions 7.8.8, the records required in Condition 7.8.9, and the reports required in Condition 7.8.10.

7.9 Emergency Distillate Oil Fired Engine-Generators

7.9.1 Description

The engines are process emission units that power electrical generators. These engine-generators generally function as a source of backup power for the plant to meet various on-site needs for electricity in the event of disruptions in the plant's internal power system. As ultra-low-sulfur diesel (ULSD) is now the only distillate fuel oil that is commercially available for engines, the fuel for the engines is now ULSD. These engines were constructed pursuant to Construction Permit #01070019.

Note: The description in Condition 7.9.1.is for informational purposes only and implies no limits or constraints

7.9.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Equipment
Engine ENG1	Emergency Diesel Engine Caterpillar Model 3516B 2628 HP, 16 cylinders Displacement 69 liters	None
Engine ENG2	Emergency Diesel Engine Caterpillar Model 3516B 2628 HP, 16 cylinders Displacement 69 liters	None
Engine ENG3	Emergency Diesel Engine Caterpillar Model 3516B 2628 HP, 16 cylinders Displacement 69 liters	None

7.9.3 Applicability Provisions

- a. The "affected engines" or "affected RICE" for the purpose of these unit-specific conditions are the engines identified in Conditions 7.9.2, as generally described in Condition 7.9.2.

7.9.4 Applicable Emission Standards

- a. Each affected engine shall comply with the 30 percent opacity standard pursuant to 35 IAC 212.123(a), which generally requires that the emission of smoke or other particulate matter from the engine shall not exhibit an opacity greater than 30 percent, into the atmosphere, except as allowed by 35 IAC 212.123(b) or 212.124.
- b. The affected engines shall comply with 35 IAC 214.301, which provides that no person shall cause or allow the emission of SO<sub>2</sub> into the atmosphere from any process emission source to excess 2000 ppm.
- c. i. Pursuant to 40 CFR 72.7(a), as new units meeting the exemption requirements of the Acid Rain Program, fuel with a sulfur content greater than 0.05 weight percent shall not be fired in the affected engines.

- ii. Pursuant to 35 IAC 214.305, on and after January 1, 2017, the sulfur content of all distillate fuel used in the affected engines shall not exceed 15 ppm. (State-Only Requirement)

7.9.5 Non-Applicability Provisions

- a. This permit is issued based on the affected engines not being subject to the requirements of 35 IAC 212.321 or 212.322 because, due to the nature of such units, a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.
- b. The affected engines are not subject to 35 IAC 216.121 because engines are not fuel combustion units, as defined by 35 IAC 211.2470.
- c. The affected engines are not subject to CAM, 40 CFR Part 64, pursuant to 40 CFR 64.2(a)(2) because the affected engines do not use an add-on control devices to achieve compliance with any applicable emission limitation or standard.
- d. Pursuant to 40 CFR 72.7(a), Acid Rain Program by meeting the new units exemption requirement, the affected engines are only subject to the Acid Rain Program Provisions of 40 CFR 72.2 through 72.7 and 72.10 through 72.13, which are the requirements applying to exempt units.
- e. Pursuant to 40 CFR 63.6590(b)(3)(iii), the affected engines do not have to meet the requirements of 40 CFR 63 Subparts ZZZZ, the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), or requirements of the General Provisions of the NESHAP, 40 CFR 63 Subpart A, other than the initial notification requirements of 40 CFR 63.6645(f), because these engines are existing emergency stationary engines as specified by 40 CFR 63.6590(a)(1)(i) and 40 CFR 63.6640(f), the engines each have a site rating more than 500 HP, the engines are located at a major source of HAP emissions, and the engines do not operate and are not contractually obligated to be available for more than 15 hours per calendar year for the purposes of emergency demand response or periods during a deviation in voltage or frequency.

7.9.6 Control Requirements and Work Practices, Operational and Production Limits, and Emission Limits

- a. The affected engines shall be operated to comply with the applicable criteria for emergency engines in the NESHAP, 40 CFR 63 Subpart ZZZZ.
- b.
  - i. The annual consumption of fuel by the affected engines shall not exceed 213,000 gallons [T1].
  - ii. The emissions of the affected engines shall not exceed the following limits [T1]:

<u>Pollutant</u>	<u>Emission Limitation</u>	
	<u>(Pounds/Hour)</u>	<u>(Tons/Year)</u>
NO <sub>x</sub>	47.7	39.5
CO	5.7	4.7
SO <sub>2</sub>	1.0	0.8
VOM	1.2	1.0
PM	1.3	1.1

- iii. Compliance with the above annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

Note: The above limits were established in Permit 01070019 to ensure that these engines do not constitute a major modification pursuant to the PSD rules.

#### 7.9.7 Opacity Testing Requirements

- a. i. The Permittee shall have the opacity of the exhaust from the affected engines during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
- A. For each affected engine, once for every 500 hours of operation. For this purpose, testing shall first be conducted within the initial 50 hours of operation of the engine after the effective date of this Condition 7.9.7(a).
- B. Upon written request by the Illinois EPA, such testing shall be conducted for specific engine(s) within 45 calendar days of the request, or on the date engine(s) next operates, or on the date agreed upon by the Illinois EPA, whichever is later.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 5.0 percent.
- iii. A. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).
- B. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.

- C. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
- iv. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:
  - A. Date and time of testing.
  - B. Name and employer of qualified observer.
  - C. Copy of current certification.
  - D. Description of observation conditions.
  - E. Description of engine operating conditions.
  - F. Raw data.
  - G. Opacity determinations.
  - H. Conclusions.

7.9.8 Sampling and Analysis of Fuel Oil

- a. Pursuant to Section 39.5(7)(d) of the Act, upon request by the Illinois EPA, the Permittee shall have the sulfur content of the oil supply to the affected engines, in ppm, determined from an analysis of representative sample of the oil supply, as follows, :
  - i. A sample shall be taken for analysis no later than 30 days after a request for such a sample is made by the Illinois EPA, provided, however, that such sample shall be taken prior to adding more oil to the relevant storage tank.
  - ii. Sampling and analysis, including that which forms the basis for the suppliers' data, shall be conducted using methods that would be acceptable under the federal NSPS for Stationary Gas Turbines, 40 CFR 60.335(b)(2) and (c), or the federal Acid Rain Program, 40 CFR 75, Appendix D, Optional SO<sub>2</sub> Emissions Data Protocol for Gas-Fired and Oil-Fired Units e.g., ASTM D4057-88 and ASTM D129-91.
- b. Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall have the NO<sub>x</sub> emissions of affected engine(s) during representative operating conditions measured as follows:
  - i. Measurements shall be conducted within 90 days of a written request from the Illinois EPA or such later date agreed to by the Illinois EPA, as specified by such request.

- ii. Testing shall be conducted using applicable Reference Methods, following timely submittal of a test protocol and notification of the date and time of testing to the Illinois EPA.
- iii. A complete report for the test shall be expeditiously submitted to the Illinois EPA following testing, no later than 60 days after the date of testing.

7.9.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected engines, pursuant to Sections 39.5(7) (a) and (e) of the Act:

- a. Operating records for each affected engine, which shall include the following information:
  - i. Information for each time the engine is operated, with date, time, duration, and purpose (i.e., exercise or power service).
  - ii. Information for the observations conducted pursuant to Condition 7.9.7(a), with date, time, personnel, and findings.
  - iii. Information for any incident in which the operation of the engine continued during malfunction or breakdown, including: date, time, and duration; a description of the incident; whether emissions exceeded or may have exceeded any applicable standard; a description of the corrective actions taken to reduce emissions and the duration of the incident; and a description of the preventative actions taken.
  - iv. Information identifying any deviation from Condition 7.9.6(a).
- b. Records for each shipment of fuel for the affected engines as required by 40 CFR 72.7(d) (2), which shall include date, supplier, quantity (in gallons), sulfur content, heat content, and whether the SO<sub>2</sub> emissions from the burning of such fuel would meet the standards and requirements in Condition 7.9.4(b) and (c).
- c. Records of total distillate fuel usage for the affected engines, gallons/month and gallons/year.
- d. i. For pollutants other than SO<sub>2</sub>, a demonstration that confirms that the hourly emissions of each affected engine comply with the hourly emission limitations in Condition 7.9.6(b) (ii) from the maximum rated load of an engine to the lowest load at which an engine would normally be operated, including calculations and supporting documentation, which may include, in order of preference:

- A. A copy of the manufacturer's guarantee for the engine's emission rates; or
  - B. Performance data from a representative emissions test performed on the engine, either at the source or as installed elsewhere, if accompanied by a summary of the test report; or
  - C. Published USEPA emission factors for the type of engine.
- e. An inspection, maintenance and repair record for each affected engine, listing activities performed with date and description.
  - f. Records for all opacity measurements made in accordance with Reference Method 9 for an affected engine that the Permittee conducts or that are conducted on its behalf by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the identity of the observer, a description of the various observations that were made, the observed opacity, and copies of the raw data sheets for the observations.
  - f. To demonstrate compliance with the annual limits in Condition 7.9.6(b) (ii), the Permittee shall keep records for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOM and PM emissions from the affected engines (tons/month and tons/year), based on the above records, with supporting calculations.

7.9.10-1 Reporting of Deviations

- a. For the affected engines, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows, pursuant to Section 39.5(7) (f) (ii) of the Act:
  - i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity from an affected engine exceeds or may have exceeded the limit in Condition 7.9.4(a) (30 percent) for eight or more 6-minute averaging periods. (Otherwise, if opacity during an incident only exceeds or may have exceeded 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in accordance with Condition 7.9.10-1(b) (iii).)
  - B. Upon conclusion of such incident, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed description of the incident and its cause(s), an explanation why continued operation of the engine was necessary, the length of time during which operation continued under such conditions, the

measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the engine was taken out of service.

- ii. Reporting within 30 days after discovery of a deviation from the requirements of Condition 7.9.6(c).

Note: After January 1, 2017, this reporting is required pursuant to 35 IAC 214.305(a)(3)(C).

- iii. A. Reporting with the quarterly reports required for Boiler 4 by Condition 7.3.10-2(a) for other deviations not addressed by Condition 7.9.10-1(a)(i) or (ii), including deviations from applicable emission standards, inspection and recordkeeping requirements. For this purpose, these reports shall include a description of each deviation and a discussion of the probable cause of such deviation, the corrective actions taken, and the preventative measures taken.
- B. With these reports, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA pursuant to Condition 7.9.10-1(a)(i) or (ii), with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.

#### 7.9.10-2 Notification for NO<sub>x</sub> Emissions

- a. If the NO<sub>x</sub> emissions of the affected engines, combined, exceed 32.0 tons in a calendar year, as addressed in the records required by Condition 7.9.9(g), the Permittee shall notify the Illinois EPA. This notification shall be submitted at the same time that the Annual Emission Report is submitted for the calendar year in which NO<sub>x</sub> emissions exceeded 32.0 tons. This notification shall: 1) Provide data for the monthly and annual NO<sub>x</sub> emissions of the engines for such year and the preceding two calendar years; 2) Identify any specific circumstances that led to NO<sub>x</sub> emissions of more than 32.0 tons in such year; and 3) If appropriate, explain why similar circumstances should not be expected in the current year.

#### 7.9.11 Operational Flexibility/Anticipated Operating Scenarios

None

#### 7.9.12 Compliance Procedures

- a. Compliance with opacity limit of Condition 7.9.4(a) is addressed by the observation and recordkeeping requirements in Conditions 7.9.7 and 7.9.9.

- b. Compliance with the SO<sub>2</sub> limit of Condition 7.9.4(b) is addressed by records required by Condition 7.9.9(c). For this purpose, complete conversion of sulfur to SO<sub>2</sub> shall be assumed, e.g., SO<sub>2</sub> emissions in lbs/mmBtu are twice the sulfur content of the fuel supply, in lbs/mmBtu.

Note: Stoichiometric combustion of distillate oil with the maximum available sulfur content, i.e., 1.0 percent would result in an SO<sub>2</sub> concentration in the exhaust of only about 535 ppm based on the F-factor for oil in Reference Method 19, which is well below the 2000 ppm limit in Condition 7.9.4(b).

- c. Compliance with the requirements of Conditions 7.9.4(c) and 7.9.6 are addressed by the emission testing addressed by Condition 7.9.7, the sampling and analysis addressed by Condition 7.9.8, the recordkeeping required by Condition 7.9.9 and reporting required by Condition 7.9.10-1.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.10 Emergency Fire Pump Engine

7.10.1 Description

This fire pump engine is an emergency engine that is part of the fire protection system at the plant. The engine was constructed as part of the Dallman 4 Project addressed by Construction Permit/PSD Approval 11040050.

Note: The description in Condition 7.10.1 is for informational purposes only and implies no constraints.

7.10.2 List of Emission Units and Air Pollution Control Equipment

The "affected engine" or "affected RICE" for the purpose of these unit-specific conditions is the engine identified below as generally described in Conditions 7.10.1.

Emission Unit	Description	Control Equipment
Emergency Fire Pump Engine	Diesel engine for fire pumps John Deere Model 6125HF070 575 HP, 6 cylinders Displacement 12.5 liters Manufactured in January 2008	None

7.10.3 Best Available Control Technology [BACT] Requirements

- a. The affected engine shall be operated in accordance with good air pollution control practices to minimize emissions [T1] [BACT].
- b. The Permittee shall comply with the following requirements for the affected engines [T1] [BACT].
  - i. The affected engine shall be used as emergency engine, as defined at 35 IAC 211.1920.
  - ii. The power output of the affected engine shall be no more than 1,500 horsepower, as necessary to qualify as an emergency or standby unit as defined by 35 IAC 211.1920.
  - iii. Operation of the affected engine shall not exceed 200 hours per calendar year.
  - iv. The fuel fired in the diesel engine shall be ultra-low sulfur diesel (ULSD) or other alternative ultra-low sulfur fuel oil containing no more than 15 ppm sulfur (e.g., bio-diesel).

7.10.4 Applicable Emission Standards

- a. The affected engine shall comply with the 30 percent opacity standard, pursuant to 35 IAC 212.123(a), which generally requires that the emission of smoke or other particulate matter from the affected engine shall not exhibit an opacity

greater than 30 percent, into the atmosphere, except as allowed by 35 IAC 212.123(b) and 212.124.

- b. The affected engine shall comply with 35 IAC 214.301, which provides that no person shall cause or allow the emission of SO<sub>2</sub> into the atmosphere from any process emission source to exceed 2000 ppm.
- c.
  - i. Pursuant to 40 CFR 60.4200(a) and 60.4218 for the affected engine, the Permittee is subject to the provisions of 40 CFR 60 Subpart IIII, the NSPS for Stationary Compression Ignition Internal Combustion Engines, and applicable General Provisions in 40 CFR 60 Subpart A as shown in Table 8 to 40 CFR 60 Subpart IIII.
  - ii. Pursuant to 40 CFR 60.4205(c) for the affected engine, the Permittee must comply with the emission standards in Table 4 to 40 CFR Subpart IIII, for the following pollutants:

NMHC + NO <sub>x</sub>	7.8	g/HP-hr
CO	2.6	g/HP-hr
PM	0.40	g/HP-hr
  - iii. Pursuant to 40 CFR 60.4307(b), the Permittee must use diesel fuel in the affected engine that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

Note: Pursuant to 35 IAC 214.305(a), on and after January 1, 2017, the sulfur content of all distillate fuel used in the affected engine must not exceed 15 ppm. (State-Only Requirement)

#### 7.10.5 Non-Applicability Provisions

- a. This permit is issued based on the affected engine not being subject to the requirements of 35 IAC 212.321 or 212.322 because, due to the nature of engines, a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.
- b. The affected engine is not subject to 35 IAC 216.121 because engine is not a fuel combustion unit as defined by 35 IAC 211.2470.
- c. The affected engine is not subject to CAM, 40 CFR Part 64, pursuant to 40 CFR 64.2(a)(2) because the affected engine does not use an add-on control device to achieve compliance with any applicable emission limitation or standard.
- d. Pursuant to 40 CFR 60.4214(b), as the affected engine is an emergency engine with a model year before 2011, the Permittee is not required to submit an initial notification under the NSPS or keep the records specified by 40 CFR 60.4214(b).

- e. Pursuant to 40 CFR 63.6590(b)(1)(i), the affected engine does not have to meet the requirements of 40 CFR Part 63 Subpart ZZZZ, the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), or requirements of the General Provisions of the NESHAP, 40 CFR 63 Subpart A, except for initial notification requirements in 40 CFR 63.6645(f). This is because the affected engine is a new emergency stationary engine, as specified by 40 CFR 63.6590(a)(2)(i) and 63.6640(f), the engine has a site rating of more than 500 HP, the engine is located at a major source of HAP emissions, the engine does not operate and is not contractually obligated to be available for more than 15 hours per calendar year for the purposes of emergency demand response or periods during a deviation in voltage or frequency.

7.10.6 Work Practices and Operational Limitations

- a. Pursuant to 40 CFR 60.4211(a), the Permittee must do the following:
  - i. Operate and maintain the affected engine according to the manufacturer's emission-related written instructions,
  - ii. Change only those emission-related settings that are permitted by the manufacturer, and
  - iii. Meet the applicable requirements of 40 CFR 89, 94 and/or 1068.
- b. Pursuant to 40 CFR 60.4211(b), the Permittee must demonstrate compliance for the affected engine by keeping records of engine manufacturer data indicating compliance with the standards.
- c. Pursuant to 40 CFR 60.4211(f), the Permittee must operate the affected engine according the following requirements:
  - i. There is no time limit on the use of the affected engine in emergency situations.
  - ii. The affected engine may be operated for a maximum of 100 hours per calendar year for the purposes of maintenance checks and readiness testing, provided that the tests are recommended by the federal state or local government, the manufacturer, the vendor or the insurance company associated with the affected engine.
  - iii. The Permittee may petition the Illinois EPA for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state or local standards require maintenance and testing of the affected engine beyond 100 hours per calendar year.

- iv. Pursuant to 40 CFR 60.4211(f)(3), the Permittee may operate the affected engine for up to 50 hours per calendar year in non-emergency situations provided these operating hours are counted as part of the 100 hours per calendar year for maintenance and testing.

7.10.7-1 Opacity Observation Requirements

- a. i. The Permittee shall have the opacity of the exhaust from the affected engine during representative operating conditions determined by a qualified observer in accordance with Reference Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
  - A. On an annual basis, unless the engine operates for less than 50 hours in the calendar year.
  - B. Once every 175 hours of operation. For this purpose, opacity testing shall first be conducted within the first 175 hours of operation after the effective date of this Condition 7.10.7-1(a).
  - C. Upon written request by the Illinois EPA, such testing shall be conducted within 45 calendar days of the request, or on the date that the affected engine next operates, or on the date agreed upon by the Illinois EPA, whichever is later.
- ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 5.0 percent.
- iii. A. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of testing, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the observer(s) and identify any concerns for successful completion of observations, i.e., lack of suitable point for proper observation or inability to conduct observations under specified operating conditions. This condition supersedes the requirements of Condition 8.6.2.
  - B. The Permittee shall promptly notify the Illinois EPA of any changes in the date or time of testing.
- iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
- v. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This

report shall include relevant information specified in Condition 8.6.3 and the following information:

- A. Summary of results.
- B. Name of certified observer(s), copy of their current certification(s), and name of employer.
- C. Description of observation location and meteorological conditions.
- D. Detailed description of the operating conditions of the affected engine during testing, including fuel consumption (gallons/hour) and firing rate (mmBtu/hr).
- E. Representative opacity data (6-minute averages) measured during testing.

7.10.7-2 Performance Testing

- a. Pursuant to 40 CFR 60.4212(d), for purposes of performance testing conducted pursuant to 40 CFR 60 Subpart IIII, exhaust emissions from the affected engine must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard pursuant to CFR 60.4205(c) (Condition 7.10.4(d)), determined from the equation in 40 CFR 60.4212(d) Alternatively, testing of the affected engine may follow the testing procedures specified in 40 CFR 60.4213, as appropriate

7.10.8 Instrumentation Requirements

- a. Pursuant to 40 CFR 60.4209(a), the Permittee must maintain a non-resettable hour meter on the affected engine.

7.10.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected engine, pursuant to Sections 39.5(7) (a) and (e) of the Act:

- a. Operating records for the affected engine, which shall include the following information:
  - i. Information for each time the engine is operated, with date, time, duration, and purpose (i.e., exercise or power service).
  - ii. Information for any incident in which the operation of the engine continued during malfunction or breakdown, including: date, time, and duration; a description of the incident; whether emissions exceeded or may have exceeded any applicable standard; a description of the corrective actions taken to reduce emissions and the duration of the incident; and a description of the preventative actions taken.

- iii. Information identifying any deviation from Condition 7.10.3, 7.10.4 or 7.10.6.
- b. Records demonstrating that the fuel oil used by the affected engine complies with the requirements in Condition 7.10.4(c) (iii) and (d), such as records from the fuel supplier indicating the sulfur content of the fuel.
- c. Records of the total diesel fuel usage of the affected engine, gallons/month and gallons/year.
- d. Records of the operating hours of the affected engine each calendar year (hours/year).
- e. A demonstration that that the emissions of the affected engine comply with the emission limits in Condition 7.10.4(c) (ii) from the maximum rated load of the engine to the lowest load at which the engine would normally be operated, including calculations and supporting documentation, which may include, in order of preference:
  - i. A copy of the manufacturer's guarantee for the engine's emission rates; or
  - ii. Performance data from a representative emissions test performed on the engine, either at the source or as installed elsewhere, if accompanied by a summary of the test report; or
  - iii. Published USEPA emission factors for the type of engine.
- f. An inspection, maintenance and repair record for the affected engine, listing activities performed with date and description.
- g. Records for all opacity measurements made in accordance with Reference Method 9 for the affected engine that the Permittee conducts or that are conducted on its behalf by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the identity of the observer, a description of the various observations that were made, the observed opacity, and copies of the raw data sheets for the observations.

#### 7.10.10 Reporting of Deviations

- A. For the affected engine, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows, pursuant to Section 39.5(7) (f) (ii) of the Act:
  - i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity from an affected engine exceeds or may have exceeded the limit in

Condition 7.10.4(a) (30 percent) for eight or more 6-minute averaging periods. (Otherwise, if opacity during an incident only exceeds or may have exceeded 30 percent for no more than seven 6-minute averaging periods, the Permittee need only report the incident in accordance with Condition 7.10.10-1(b) (ii).)

- B. Upon conclusion of such incident, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed description of the incident and its cause(s), an explanation why continued operation of the engine was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the engine was taken out of service.
- ii. Reporting within 30 days after discovery of a deviation from the requirements of Condition 7.10.4(c) (iii).

Note: After January 1, 2017, this reporting is required pursuant to 35 IAC 214.305(a) (3) (C).

- iii. A. Reporting with the quarterly reports required for the Boiler 4 by Condition 7.3.10-2(a) for other deviations not addressed by Condition 7.10.10-1(a) (i) or (ii), including deviations from applicable emission standards, inspection and recordkeeping requirements. For this purpose, these reports shall include a description of each deviation and a discussion of the probable cause of such deviation, the corrective actions taken, and the preventative measures taken.
- B. With these reports, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA pursuant to Condition 7.10.10-1(a) (i) or (ii), with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.

#### 7.10.11 Compliance Procedures

- a. Compliance with opacity limit of Condition 7.10.4(a) is addressed by the work practices, observation, and recordkeeping requirements in Conditions 7.10.6(a), 7.10.7 and 7.10.9.
- b. Compliance with the SO<sub>2</sub> limit of Condition 7.10.4(b) is addressed by records required by Condition 7.10.9(b).

Note: Stoichiometric combustion of distillate oil with a sulfur content of 1.0 percent would result in an SO<sub>2</sub> concentration in the exhaust of only about 535 ppm based on the F-factor for oil in Reference Method 19, which is well below the 2000 ppm limit in Condition 7.10.4(b).

- c. Compliance with the requirements of Conditions 7.10.3, 7.10.4(c) and 7.10.6 are addressed by the testing and recordkeeping required by Conditions 7.10.6, 7.10.7-2 and 7.10.9.

Note: This condition is included in this permit pursuant to Section 39.5(7) (p) (v) of the Act.

7.11 Gasoline Storage Tank

7.11.1 Description

The gasoline storage tank stores gasoline for use in plant vehicles.

Note: The description in Condition 7.11.1 is for informational purposes only and implies no limits or constraints

7.11.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Tank T1	Gasoline Storage Tank 500 Gallon Capacity	Submerged Loading Pipe

7.11.3 Applicability Provisions

The "affected storage tank" for the purpose of these unit-specific conditions, is the storage tank described in Conditions 7.11.1 and 7.11.2.

7.11.4 Applicable Emission Standards

a. The affected storage tank is subject to 35 IAC 215.122(b) and 215.583(a)(1), which provide that:

i. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201 or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2) [35 IAC 215.122(b)].

Note: The exception to this standard at 35 IAC 215.122(c) is not applicable because the vapor pressure of gasoline is greater than 17.24 kPa (2.5 psia) at 294.3°K (70°F).

ii. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary storage tank at a gasoline dispensing facility unless the tank is equipped with a submerged loading pipe [35 IAC 215.583(a)(1)].

7.11.5 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected tank not being subject to the requirements of 35 IAC 215.583(a)(2) related to transfers of gasoline to a stationary storage tank at gasoline dispensing facilities because the affected tank is located at a plant in Sangamon County [35 IAC 215.583(b)].

- b. The affected gasoline storage tank is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for VOM because the affected storage tank does not use add-on controls to achieve compliance with any applicable emission limits.

7.11.6 Work Practices, Operational and Production Limits, and Emission Limitations

- a. Pursuant to Condition 7.11.4(a) (35 IAC 215.122(b) and 215.583(a)), the affected storage tank shall be equipped, operated and maintained with a submerged loading pipe or an equivalent device approved by the Illinois EPA. (The Illinois EPA has not approved use of other equivalent equipment in lieu of a submerged loading pipe.)

7.11.7 Inspection Requirements

On an annual basis, in the period between March 1 and April 30 of each year, the Permittee shall conduct an inspection of the affected tank and its physical condition and ability to comply with the applicable equipment requirements of Conditions 7.11.6(a), pursuant to Sections 39.5(7) (a) and (d) of the Act.

7.11.8 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected storage tank, pursuant to Sections 39.5(7) (a) and (e) of the Act:

- a. Design information for the capacity of the tank and the presence of a permanent submerged loading pipe.
- b. Operating records for the affected tank that at a minimum, shall include the following:
  - i. Information documenting performance of the Inspections that are required by Condition 7.11.7, including date and description of the inspection, confirmation of the adequacy of the specific features of the tank required for control of emissions, and identification of any such features that are not in proper working order or otherwise deficient, with recommendations for maintenance, repair or replacement.
  - ii. Information identifying deviations from applicable equipment requirements, with a detailed description and explanation.
- c. Maintenance and repair records for the affected storage tank, as related to the repair or replacement of the loading pipe.
- d. Throughput of material, gallons/mo and gallons/yr, by type of material.

7.11.9 Reporting Requirements

For the affected storage tank, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. Such notifications shall include a description of each incident and a discussion of the probable cause of deviation, any corrective actions taken and any preventative measures taken, pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. Notification within 30 days for any filling of the affected storage tank that was not in compliance with the requirements of Conditions 7.11.4 or 7.11.6, i.e., that was conducted without a submerged loading pipe.
- b. Notification with the quarterly reports required by Condition 7.1.10-2(a), 7.2.10-2(a) and 7.3.10-2(a) for other deviations, including deviations from applicable recordkeeping requirements.

7.11.10 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected storage tank without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or for an activity constituting construction or modification as defined in 35 IAC 201.102.

- a. Changes to components related to the submerged loading pipe, including addition of new components and repair and replacement of components.
- b. Changes in the material stored in the affected storage tank.

7.11.11 Compliance Procedures

- a. Compliance with Conditions 7.11.4(a) is addressed by the use of a submerged loading pipe as required in Condition 7.11.6(a) and by the inspections and recordkeeping required by Conditions 7.11.7 and 7.11.8.
- b. Compliance with Condition 7.11.6(a) is addressed by the inspections and the recordkeeping required by Conditions 7.11.7 and 7.11.8.

Note: This condition is included in this permit pursuant to Section 39.5(7)(p)(v) of the Act.

7.12 Roadways and Other Open Area Sources of Fugitive Dust

7.12.1 Description

The affected units for the purpose of these unit-specific conditions are roadways, parking areas, and other open areas at the plant, which may be sources of fugitive particulate due to vehicle traffic or windblown dust. These emissions are controlled by paving and implementation of work practices to prevent the generation and emissions of particulate matter. Requirements for affected units in this section of this permit that are identified as T1 (Title I) conditions were established in Section 2.4 of Construction Permit/PSD Approval 04110050.

Note: The description in Condition 7.12.1 is for informational purposes only and implies no limits or constraints

7.12.2 List of Emission Units and Air Pollution Control Measures

The "affected units" for the purpose of these unit-specific conditions, are roadways, parking areas, and other open areas at the plant as identified below and generally described in Conditions 7.12.2.

Emission Unit	Description	Emission Control Measures
Roadways and Other Open Area Sources of Fugitive Dust	Roadways and Other Open Area Sources of Fugitive Dust	Pavement, flushing, vacuuming, dust suppression application, etc.

7.12.3 Best Available Control Technology [BACT] Requirements

- a. The opacity of fugitive particulate emissions from affected units, except during periods of high wind speeds, shall not exceed 10 percent opacity. For this purpose, opacity and the presence of high wind speeds shall be determined in accordance with 35 IAC 212.109 and 35 IAC 212.314, respectively [T1] [BACT].
- b. Good air pollution control practices shall be implemented to minimize and significantly reduce nuisance dust from affected units [T1] [BACT].
  - i. These practices shall provide for pavement on all regularly traveled roads and treatment (flushing, vacuuming, dust suppressant application, etc.) of roadways and areas that are routinely subject to vehicle traffic for very effective control of dust (nominal 90 percent control).
  - ii. For this purpose, roads that serve any new office building, new employee parking areas or are used on a daily basis by operating and maintenance personnel in the course of their typical duties, roads that experience heavy use during regularly occurring maintenance during the course of a year, shall all be considered to be subject to regular travel and are

required to be paved. Regularly traveled roads shall be considered to be subject to routine vehicle traffic except as they are used primarily for periodic maintenance and are currently inactive or as traffic has been temporarily blocked off. Other roads shall be considered to be routinely traveled if activities are occurring such that they are experiencing significant vehicle traffic.

- c. The handling of material collected from any affected unit by sweeping or vacuuming trucks shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods to control PM emissions. [T1][BACT]

#### 7.12.4 Applicable Emission Standards

- a. All affected units shall comply with 35 IAC 212.301, which provides that emissions of fugitive particulate matter shall not be visible from any process, including any material handling or storage activity, when looking generally toward the zenith at a point beyond the property line of the source, except when the wind speed is greater than 25 miles per hour, as provided by 35 IAC 212.314.

#### 7.12.5 Control Requirements and Work Practices

- a. The Permittee shall carry out control of fugitive particulate emissions from all affected units in accordance with a written operating program describing the measures being implemented in accordance with Conditions 7.12.3(b) and 7.12.4(b) and (c) to control emissions at each unit with the potential to generate significant quantities of such emissions, which program shall be kept current [T1].
  - i. The written operating program shall include:
    - A. Maps or diagrams indicating the location of affected units with the potential to generate significant quantities of fugitive particulate, with description of the unit (length, width, surface material, etc.) and volume and nature of expected vehicle traffic, or other activity on such unit, and an identification of any roadways that are not considered routinely traveled, with justification.
    - B. A detailed description of the emissions control technique(s) (e.g., vacuum truck, water spray, surfactant spray, water flushing, dust suppressant application, or sweeping) for the affected unit, including: typical application rate; type and concentration of additives; normal frequency with which measures would be implemented; circumstances, in which the measure would not be implemented, e.g., recent precipitation; triggers for additional control, e.g., observation of 8 percent opacity; and calculated control efficiency for PM emissions.

- ii. If there are significant amendments to the operating program, the Permittee shall submit a copy of the amended program to the Illinois EPA for review within 30 days of the date that the amendment is made.
- iii. A revised operating program shall be submitted to the Illinois EPA for review within 90 days of a request from the Illinois EPA for revision to address observed deficiencies in control of fugitive particulate emissions.

7.12.6 Emission Limits

- a. The emissions of PM from affected units, as PM<sub>10</sub>, shall not exceed the following limits. Compliance with these annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). Compliance with these limits shall be determined by vehicle traffic and other activities at the plant, information for the implementation of the operating program, appropriate emission factors, and emission estimation methodology, i.e., factors and estimation methodology developed and published by USEPA [T1].
  - i. Total emissions from the affected units associated with operation of Dallman Boiler 4 shall not exceed 7.7 tons/year.
  - ii. Total emissions from all affected units shall not exceed 20.6 tons/year.
  - iii. Total emissions from the "entrance road" shall not exceed 5.8 tons/year and 31.8 pounds/day. For this purpose, the entrance road is the road segment starting at the entrance to the plant on Stevenson Drive and continuing along near the northwestern borders of the plant for approximately 1100 feet, upon which most trucks serving the plant travel.

7.12.7 Operational Measurement Requirements

- a. The Permittee shall conduct measurements of the silt loading on various affected roadway segments and parking areas, as follows [T1]:
  - i. Sampling and analysis of the silt loading shall be conducted using the "Procedures for Sampling Surface/Bulk Dust Loading", Appendix C.1 in Compilation of Air Pollutant Emission Factors, USEPA, AP-42. A series of samples shall be taken to determine the average silt loading and address the change in silt loadings as related to the amount and nature of vehicle traffic and implementation of the operating program.
  - ii. Measurements shall be performed by the following dates:

- A. Measurements shall be conducted within 30 days in the event of changes involving affected units that would act to increase silt loading (so that data that is representative of the current circumstances of the affected units has not been collected), including changes in the amount or type of traffic on affected units, changes in the standard operating practices for affected units, such as application of salt or traction material during cold weather, and changes in the operating program for affected units.
  - B. Upon written request by the Illinois EPA, the Permittee shall conduct measurements, as specified in the request, which shall be completed within 75 days of the Illinois EPA's request.
- iii.
- A. Pursuant to Condition 3.2 of Construction Permit #04110050, the test plan shall be submitted to the Illinois EPA for review at least 60 days prior to the actual date of testing. This plan shall describe the specific procedures for testing and shall, at a minimum, include the following information.
    - I. The person(s) who will be performing sampling and analysis and their experience with similar tests.
    - II. The specific conditions, e.g., operating rate and control device operating conditions, under which testing shall be performed including a discussion of why these conditions will be representative and the means by which the operating parameters will be determined.
    - III. The specific determinations of emissions that are intended to be made, including sampling or monitoring locations. As part of this plan, the Permittee may set forth a strategy for performing emission testing in the normal load range of the boiler.
    - IV. The test method(s) that will be used, with the specific analysis method if the method can be used with different analysis methods.
  - B. As provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for subsequent emissions testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below,

contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).

- C. I. The Permittee shall notify the Illinois EPA prior to performing emissions testing required by this permit to enable the Illinois EPA to observe the tests. Notification for the expected date of testing shall be submitted a minimum of 30 days\* prior to the expected date, and identify the testing that will be performed. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days\* prior to the actual date of testing.

- \* For a particular test, the Illinois EPA may at its discretion accept shorter advance notification provided that it does not interfere with the Illinois EPA's ability to observe testing.

- II. This notification shall also identify the parties that will be performing testing and the set or sets of operating conditions under which testing will be performed.

- D. The Permittee shall submit the Final Report(s) for emission testing required by this permit to the Illinois EPA within 45 days after the test results are compiled and finalized but not later than 120 days after the date of testing. At a minimum, the Final Report for testing shall contain:

- I. General information, i.e., testing personnel and test dates;

- II. A summary of results;

- III. Description of test method(s), including a description of sampling points, sampling train, analysis equipment, and test schedule;

- IV. The operating conditions of the emission unit and associated control devices during testing; and

- V. Data and calculations, including copies of all raw data sheets and records of laboratory analysis, sample calculations, and data on equipment calibration.

- E. The Permittee shall submit test notifications and test reports for these measurements as specified by General Permit Conditions 8.6.2 and 8.6.3.

7.12.8 Monitoring Requirements

- a. The Permittee shall conduct observations of the opacity of fugitive particulate emissions from the affected units as follows:
  - i. Performance observations, which include a series of observations, shall be conducted as follows to determine the range of opacity from affected units and the change in opacity as related to the amount and nature of vehicle traffic and implementation of the operating program. For performance observations, the Permittee shall submit test plans, test notifications and test reports, as specified by General Permit Conditions 8.6.2 and 8.6.3.
    - A. Performance observations shall be repeated within 30 days in the event of changes involving affected units that would act to increase opacity (so that observations that are representative of the current circumstances of the affected units have not been conducted), including changes in the amount or type of traffic on affected units, changes in the standard operating practices for affected units, such as application of salt or traction material during cold weather, and changes in the operating program for affected units.
  - ii. Compliance observations shall be conducted for affected units on at least a quarterly basis to verify opacity levels and confirm the effectiveness of the operating program in controlling emissions.
  - iii. Upon written request by the Illinois EPA, the Permittee shall conduct performance or compliance observations, as specified in the request. Unless another date is agreed to by the Illinois EPA, performance observations shall be completed within 30 days and compliance observations shall be completed within 5 days of the Illinois EPA's request [T1].
- b. The Permittee shall conduct inspections of affected units on a monthly basis with personnel not directly responsible for the day-to-day implementation of the fugitive dust control program, for the specific purpose of verifying that the measures identified in the operating program and other measures required to control emissions from affected units are being properly implemented [T1].

7.12.9 Recordkeeping Requirements

- a. The Permittee shall keep a file that contains the following information for the affected units [T1]:
  - i. The operating factors, if any, used to determine the amount of activity associated with the affected units

or the PM emissions from the affected units, with supporting documentation.

- ii. The designated PM emission rate, in tons/year, from each category of affected units (e.g., traffic associated with receiving of limestone for Boiler 4), with supporting calculations and documentation. The sum of these rates shall not exceed the annual limits on emissions in Condition 7.12.6.
- b. The Permittee shall maintain records documenting implementation of the operating program required by Condition 7.12.5, including the following records [T1]:
- i. Records for each treatment of an affected unit or units:
    - A. The identity of the affected unit(s), the date and time, and the identification of the truck(s) or treatment equipment used;
    - B. For application of dust suppressant by truck: target application rate or truck speed during application, total quantity of water or chemical used and, for application of a chemical or chemical solution, the identity of the chemical and concentration, if applicable;
    - C. For sweeping or cleaning: Identity of equipment used and identification of any deficiencies in the condition of equipment; and
    - D. For other type of treatment: A description of the action that was taken.
  - ii. Records for performance of the inspections required by Condition 7.12.8(b), including description of inspection, date and time, and findings.
  - iii. Records for each incident when control measures were not implemented and each incident when additional control measures were implemented due to particular activities, including description, date, the means by which the incident was identified, a statement of explanation, and expected duration of such circumstances.
- c. The Permittee shall record any period during which an affected unit was not properly controlled as required by this permit, which records shall include at least the following information: the date, time and estimated duration of the event; a description of the event; the manner in which the event was identified, if not readily apparent; the probable cause for deviation, if known, including a description of any equipment malfunction/breakdown associated with the event; information on the magnitude of the deviation; confirmation that standard procedures were followed or a description of any event-specific corrective actions taken; and a

description of any preventative measures taken to prevent future occurrences, if appropriate, and an estimate of the additional PM emissions that resulted, if any, with supporting calculations [T1].

- d. The Permittee shall keep records for the measurements conducted for affected units pursuant to Condition 7.12.7, including records for the sampling and analysis activities and results [T1].
- e. The Permittee shall maintain records for the PM emissions of the affected units to verify compliance with the limits in Condition 7.12.6, based on operating data for Boiler 4 and other activities at the plant, the above records for the affected units including data for implementation of the operating program, and appropriate emission estimation methodology and emission factors, with supporting calculations [T1].

#### 7.12.10 Reporting Requirements

##### a. Reporting of Deviations

- i. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected units with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:
  - A. Emissions of PM from the affected units in excess of the limits specified in Condition 7.12.6 within 30 days of such occurrence that are not addressed by the regular reporting required below. These notifications shall include at least the following information:
    - I. The date and time of the event;
    - II. A description of the event;
    - III. Information on the magnitude of the deviation;
    - IV. A description of the corrective measures taken; and
    - V. A description of any preventative measures taken to prevent future occurrences.
- ii. The Permittee shall submit quarterly reports to the Illinois EPA for affected units stating the following:
  - A. The dates any necessary control measures were not implemented.

- B. A listing of those control measures.
- C. The reasons that the control measures were not implemented.
- D. Any corrective actions taken.
- E. This information includes, but is not limited to, those dates when controls were not implemented based on a belief that implementation of such control measures would have been unreasonable given prevailing weather conditions.
- F. This report shall be submitted to the Illinois EPA no later than 45 calendar days from the end of each calendar quarter.

7.12.11 Compliance Procedures

- a. Compliance with the opacity limit of Condition 7.12.3(a) is addressed by the Control Requirements and Work Practices requirements in Condition 7.12.5, the Operational Measurement Requirements in Condition 7.12.7, the monitoring requirements in Condition 7.12.8, the records required in Condition 7.12.9, and the reports required in Condition 7.12.10.
- b. Compliance with the Fugitive PM standard of Condition 7.12.4(a) is addressed by the Control Requirements and Work Practices requirements in Condition 7.12.5, the Operational Measurement Requirements in Condition 7.12.7, the monitoring requirements in Conditions 7.12.8, the records required in Condition 7.12.9, and the reports required in Condition 7.12.10.
- c. Compliance with the PM emission limitation of Condition 7.12.6 is addressed by the Control Requirements and Work Practices requirements in Condition 7.12.5, the Operational Measurement Requirements in Condition 7.12.7, the monitoring requirements in Condition 7.12.8, the records required in Condition 7.12.9, and the reports required in Condition 7.12.10.

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA as specified in Section 6.1. To the extent that the federal regulations promulgated under Title IV of the CAA, are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV of the CAA shall take precedence pursuant to Section 39.5(17)(j) of the Act.

### 8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;

- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
  - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

#### 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the condition of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

#### 8.6 Reporting Requirements

##### 8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Section 7 of this permit [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

#### 8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

#### 8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;

- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

#### 8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:
  - i. Illinois EPA - Air Compliance Section  
  
Illinois Environmental Protection Agency  
Bureau of Air  
Compliance & Enforcement Section (MC 40)  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276
  - ii. Illinois EPA - Air Regional Field Office  
  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
412 SW Washington Street, Suite D  
Peoria, Illinois 61602
  - iii. USEPA Region 5 - Air Branch  
  
USEPA (AR - 17J)  
Air & Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604
- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:  
  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
1021 North Grand Avenue East  
P.O. Box 19506  
Springfield, Illinois 62794-9506

## 8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the Clean Air Act (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a combination of conditions of such previous permits and revisions to those conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance with, or violation of, any applicable requirement to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the Permittee, including, but not limited to, challenging the use of the USEPA's credible evidence rule in the context of any future proceeding consistent with *Clean Air Implementation Project v. EPA*, 150 F3d 1200 (D.C. Circuit 1998).

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Board regulations [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Sections 4 and 39.5(7)(a) and (p)(ii) of the Act].

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor any substances or parameters at any location:
  - i. At reasonable times, for the purposes of assuring permit compliance; or
  - ii. As otherwise authorized by the CAA or the Act;
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

#### 9.4 Fees

The Permittee shall pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. Fees shall be paid by check sent to the Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

#### 9.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

#### 9.6 Recordkeeping

##### 9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

##### 9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

##### 9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit including any plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

#### 9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254 and Section 4(b) of the Act.

#### 9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the

applicable requirements or by permit condition. The compliance certifications shall be submitted to Illinois EPA, Air Compliance Section. (The addresses for the submittal of these compliance certifications are provided in Condition 8.6.4.)

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

Note: Copies of compliance certifications no longer must be submitted to the USEPA or Illinois EPA Regional Office.

- b. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

#### 9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

#### 9.10 Defense to Enforcement Actions

##### 9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

##### 9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating records or other relevant evidence:

- i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency;

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the

emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

#### 9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

##### 9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5) (e) and (i) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7) (o) (v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7) (i) of the Act].

9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Sections 39.5(5) (1) and (o) of the Act].

Note: Pursuant to Sections 39.5(5) (h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7) (a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP

permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

Note: This condition is included in this permit pursuant to Section 39.5(7)(n) of the Act.

10.0 ATTACHMENTS

10.1 Attachment 1 Emissions of Particulate Matter from New Process Emission Units

35 IAC 212.321 - Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A(P)^B$$

where:

P = Process weight rate; and  
E = Allowable emission rate; and,

- i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

- ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

c. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 19, 1972 [35 IAC 212.321(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

10.2 Attachment 2 Emissions of Particulate Matter from Existing Process  
Emission Units

35 IAC 212.322 - Process Emission Units for Which Construction or  
Modification Commenced Prior to April 14, 1972

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].
- b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

$$E = C + A(P)^B$$

where:

P = Process weight rate; and  
E = Allowable emission rate; and,

- i. Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

- ii. For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972 [35 IAC 212.322(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.2	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22
0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

10.3 Attachment 3 - Acid Rain Program Permit

217-785-1705

**ACID RAIN PROGRAM  
PERMIT**

City, Water, Light and Power  
Office of Public Utilities  
Attn: P.J. Becker, Designated Representative  
4th Floor, Municipal Center East  
Springfield, Illinois 62757

Oris Nos.: 963 (Dallman)  
IEPA I.D. No.: 167120AAO  
Source/Unit: Dallman/Units 31, 32, 33 and 4  
Date Received: June 13, 2014  
Date Issued: TBD  
Effective Date: January 1, 2015  
Expiration Date: May 16, 2018

**STATEMENT OF BASIS:**

In accordance with Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program permit to the City, Water, Light and Power for its Dallman Units at it Lake Springfield Power Plant.

**SULFUR DIOXIDE (SO<sub>2</sub>) ALLOCATIONS AND NITROGEN OXIDES (NO<sub>x</sub>) REQUIREMENTS FOR EACH AFFECTED UNIT:**

DALLMAN UNIT 31	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73*	Phase 2B Allocations (2010 & Beyond)  1388
	NO <sub>x</sub> Limit	None (Pursuant to 40 CFR 76.6(a)(2), Cyclone Fired Boiler With Steam Flow Less Than 1,060, in Thousands of Lbs/Hour at 100% Load)

DALLMAN UNIT 32	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73*	Phase 2B Allocations (2010 & Beyond)  1570
	NO <sub>x</sub> Limit	None (Pursuant to 40 CFR 76.6(a)(2), Cyclone Fired Boiler With Steam Flow Less Than 1,060, in Thousands of Lbs/Hour at 100% Load)

DALLMAN UNIT 33	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73*	Phase 2B Allocations (2010 & Beyond)
		5208
	NO <sub>x</sub> Limit	0.40 lb/mmBtu (Standard Limit for Phase II Tangentially Fired Boilers)

\* Includes allowances from the USEPA's 1998 reallocation due to a reduction in the Repowering set-aside [63 FR 51726, 51727, September 28, 1998, Table 2 -Phase II Allowance Allocations].

DALLMAN UNIT 4	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	Phase 2B Allocations (2010 & Beyond)
		N/A
	NO <sub>x</sub> Limit	0.40 lb/mmBtu (Standard Limit for Phase II Tangentially Fired Boilers)

**PERMIT APPLICATION:** The permit application, including the NO<sub>x</sub> compliance plan and SO<sub>2</sub> allowance requirements, is attached and incorporated as part of this permit. The owners and operators of this source must comply with the standard requirements and special provisions set forth in the application.

**COMMENTS, NOTES AND JUSTIFICATIONS:** This permit contains provisions related to sulfur dioxide (SO<sub>2</sub>) emissions and requires the owners and operators to hold SO<sub>2</sub> allowances to account for SO<sub>2</sub> emissions. An allowance is a limited authorization to emit up to one ton of SO<sub>2</sub> during or after a specified calendar year. The transfer of allowances to and from a unit account does not necessitate a revision to the unit SO<sub>2</sub> allocations denoted in this permit (See 40 CFR 72.84).

This permit contains provisions related to NO<sub>x</sub> emissions requiring Dallman Units 33 and 4 to comply with applicable emission limitations for NO<sub>x</sub> under the Acid Rain program.

In addition to the described NO<sub>x</sub> compliance plan for Dallman Units 33 and 4, each affected unit shall comply with all other applicable requirements of 40 CFR Part 76, including, the duty to reapply for a NO<sub>x</sub> compliance plan, and requirements covering excess emissions.

This permit does not affect the source's responsibility to meet all other applicable local, state and federal requirements.

If you have any questions regarding this permit, please contact the CAAPP Unit at 217/785-1705.

Raymond E. Pilapil  
Acting Manager, Permits Section  
Division of Air Pollution Control

REP:MTR:DR:psj

cc: Cecilia Mijares, USEPA Region V



United States  
Environmental Protection Agency  
Acid Rain Program

OMB No. 2060-0258

# Phase II NO<sub>x</sub> Compliance Plan

Page  of

For more information, see instructions and refer to 40 CFR 76.9

This submission is:  New  Revised

**STEP 1**  
Indicate plant name, State, and ORIS code from NADB, if applicable

Dallman	IL	963
Plant Name	State	ORIS Code

**STEP 2**

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

33 ID#	4 ID#	ID#	ID#	ID#	ID#
T Type	T Type	Type	Type	Type	Type

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) NO <sub>x</sub> Averaging Plan (include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Plant Name (from Step 1)

NO<sub>x</sub> Compliance - Page 2  
Page  of

STEP 2, cont'd.

ID#	ID#	ID#	ID#	ID#	ID#
Type	Type	Type	Type	Type	Type

(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)	<input type="checkbox"/>					
(n) AEL (Include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	<input type="checkbox"/>					
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	<input type="checkbox"/>					
(p) Repowering extension plan approved or under review	<input type="checkbox"/>					

**STEP 3**  
Read the standard requirements and certification, enter the name of the designated representative, sign &

**Standard Requirements**

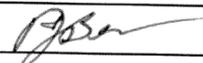
General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

**Special Provisions for Early Election Units**

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub>, as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).  
Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.  
Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub>, for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub>, for Phase II units with Group 1 boilers under 40 CFR 76.7.

**Certification**

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name P.J. Becker / Env. Health & Safety Manager	
Signature 	Date June 13, 2014



## Acid Rain Program Instructions for Phase II NO<sub>x</sub> Compliance Plan (40 CFR 76.9)

The U.S. Environmental Protection Agency has promulgated regulations designed to substantially reduce the annual emissions of nitrogen oxides (NO<sub>x</sub>) from coal-fired electric utilities. The NO<sub>x</sub> Emission Reduction regulations are found at 40 CFR part 76 and apply to each existing coal-fired utility unit that is subject to sulfur dioxide (SO<sub>2</sub>) emission reduction requirements under Sections 404, 405, or 409 of the Clean Air Act. Under 40 CFR 76.9, the owner or operator of each affected unit subject to 40 CFR part 76 must include a compliance plan for NO<sub>x</sub> emissions in the Acid Rain permit application for that unit. The designated representatives (DRs) of Phase I and Phase II NO<sub>x</sub>-affected units with Group 1 or Group 2 boilers must submit an initial Phase II NO<sub>x</sub> compliance plan to the appropriate title V air permitting authority (in most cases, the State or local air permitting authority) not later than **January 1, 1998**. A Group 1 boiler is a tangentially fired boiler or a dry bottom wall-fired boiler. A Group 2 boiler is a cell burner boiler, cyclone boiler, vertically fired boiler, or a wet bottom boiler. Once the title V permitting authority receives the Phase II NO<sub>x</sub> compliance plans, it will in turn review them and incorporate approved plans into the Phase II Acid Rain permits issued by the permitting authority to Phase II affected sources.

### General Instructions

- (1) Please type or print in black ink.
  - (2) NADB is the National Allowance Data Base for the Acid Rain Program. To obtain the database on diskette, call the Acid Rain Hotline at (202) 343-9620. This data file is in dBase format for use on an IBM-compatible PC. It requires 2 megabytes of hard drive memory. If the unit is not listed in NADB, use the plant name, ORIS code, and boiler ID#(s) listed on the Certificate of Representation for the affected source.
  - (3) If more space is needed, photocopy the pertinent page. When you have completed the form, indicate the page order and total number of pages (*e.g.*, 1 of 4, 2 of 4, etc.) in the boxes in the upper right hand corner of each page.
  - (4) Submit one complete set of all forms with **original** signatures to:
    - (a) The appropriate title V permitting authority (for NO<sub>x</sub> Averaging Plans, a copy of the plan must be submitted to any **other** title V permitting authority with jurisdiction over any of the units in the plan).
- and
- One **copy** to:
- (b) U.S. Environmental Protection Agency  
Clean Air Markets Division (6204J)  
Attn: Phase II NO<sub>x</sub>  
1200 Pennsylvania Ave., NW  
Washington, DC 20460
- (5) For assistance, call the Acid Rain Hotline at (202) 343-9620.

### NO<sub>x</sub> Compliance Options

#### STEP 2

##### General

Indicate a proposed method of compliance with the NO<sub>x</sub> emissions requirements for each unit at the source affected for NO<sub>x</sub> during Phase II. A Phase II NO<sub>x</sub> compliance plan must account for each year the Phase II acid rain permit will be effective. Further, a NO<sub>x</sub> compliance plan is in effect only through the term of the acid rain permit covering the NO<sub>x</sub>-affected units. **A new NO<sub>x</sub> compliance plan must be submitted when an acid rain permit renewal application is due.**

##### NO<sub>x</sub>-affected Units

To determine if an affected unit subject to Acid Rain SO<sub>2</sub> requirements is also subject to NO<sub>x</sub> emission limitations, see 40 CFR 76.1, the definitions at 40 CFR 76.2, and the emission limitations at 40 CFR 76.5, 76.6, and 76.7. Most existing coal-fired units that are subject to Acid Rain SO<sub>2</sub> requirements and that have a Group 1 or Group 2 boiler are also subject to the NO<sub>x</sub> emission limitations under 40 CFR part 76.

### Phase I Group 1 Boilers

Compliance options (a) and (b) are standard annual emission limitations, one of which may be selected for a Phase I Group 1 boiler. The limits also apply to Phase II Group 1 boilers that are covered by an early election plan previously approved by U.S. EPA.

### Early Election

Compliance option (c), NO<sub>x</sub> early election, is available only to Phase II Group 1 boilers with early election plans submitted by January 1, 1997 and approved by U.S. EPA. All such plans terminate no later than December 31, 2007. DRs with NO<sub>x</sub> early election units must select option (c) and either (a) or (b), the Phase I Group 1 standard emissions limit specified for the unit in the plan. If the termination date of the plan will be prior to the expiration date of the acid rain permit covering an early election unit, the DR must indicate an additional NO<sub>x</sub> compliance option that will apply to the unit beginning when the plan terminates through the date by which the acid rain permit will expire. In such cases the DR must mark option (c) and either (a) or (b), as well as the additional box(es) denoting the additional, follow-on NO<sub>x</sub> compliance option. For early election units in a common stack, see also the instructions under Common Stacks.

### Phase II Group 1 Boilers

Compliance options (d) and (e) denote standard annual emission limitations, one of which may be selected for a Phase II Group 1 boiler.

### Phase II Group 2 Boilers

Compliance options (f) through (i) denote standard annual emission limitations, one of which may be selected for a Phase II Group 2 boiler.

### NO<sub>x</sub> Averaging

Compliance option (j) denotes the annual emission limitation under a NO<sub>x</sub> averaging plan, which may be selected in lieu of a standard annual emission limit for Group 1 or Group 2 boilers with the same owner or operator and the same DR. See instructions below and include Phase II NO<sub>x</sub> averaging form.

### Common Stacks

A unit that utilizes a common stack and is separately monitored for NO<sub>x</sub> (i.e., has its own NO<sub>x</sub> monitor and diluent monitor) is treated as the same as a unit that emits only through its own separate stack.

A unit (other than an early election unit) that utilizes a common stack and is not monitored separately must select one of the applicable common stack options. If the unit shares a common stack with other affected units and no non-affected units and if each of the units has a NO<sub>x</sub> emission limitation, three options are available: comply with the most stringent NO<sub>x</sub> emission limitation applicable

to any unit utilizing the common stack (option (k)); include the units in a NO<sub>x</sub> averaging plan (option (l)); or use an approved method for apportioning the combined NO<sub>x</sub> emission rate in the common stack (option (m)). If the unit shares a common stack with at least one other unit that does not have a NO<sub>x</sub> emission limitation or with at least one non-affected unit, you must use an approved method for apportioning the combined NO<sub>x</sub> emission rate (option (m)), unless, of course, the unit is separately monitored. An early election unit that utilizes a common stack, that is not monitored separately, and whose early election plan specifies option (k) or (m) for the unit, must select such option.

If an apportionment option is chosen, check, in addition to option (m), the box at Step 2 that indicates the applicable emission limitation and submit to U.S. EPA the documentation supporting apportionment with the monitoring plan submission.

### Alternative Emissions Limitations

Compliance option (n) must be selected by a Phase II Group 1 or Group 2 boiler that is applying for an AEL demonstration period, or final AEL, starting in Phase II. Compliance option (n) must also be chosen by a boiler that is renewing for Phase II a final AEL approved by U.S. EPA (see instructions accompanying Phase II AEL Demonstration Period, Final AEL Petition, and AEL Renewal forms and include appropriate form).

Compliance option (o) must be selected by a boiler that has applied to U.S. EPA for an AEL demonstration period or final AEL which is undergoing review by U.S. EPA. If a final AEL is subsequently approved by U.S. EPA, a revised Phase II NO<sub>x</sub> compliance plan must be submitted marking option (o) and attaching an AEL Renewal form. If an AEL demonstration period or final AEL is subsequently disapproved by U.S. EPA, a revised Phase II NO<sub>x</sub> compliance plan must be submitted indicating which Phase II NO<sub>x</sub> compliance option will be used by the boiler.

### Repowering Extension Plans

Compliance option (p) must be selected by a boiler that is covered by either an approved repowering extension plan or a plan that is undergoing review. If a repowering extension plan undergoing review is subsequently disapproved, a revised Phase II NO<sub>x</sub> compliance plan must be submitted indicating which Phase II NO<sub>x</sub> compliance option will be used by the boiler. If the termination date of either the repowering extension plan undergoing review or the approved plan is prior to the expiration date of the acid rain permit covering the repowered (or replacement) boiler under the plan, the DR must indicate an additional NO<sub>x</sub> compliance option that will apply to the boiler beginning when the plan terminates through the date by which the acid rain permit will expire. In such cases the DR must mark option (p), as well as additional box(es) denoting the additional, follow-on NO<sub>x</sub> compliance option.

## NO<sub>x</sub> Averaging Plan

Under 40 CFR 76.11 any affected units under control of the same owner or operator and with the same designated representative may average their NO<sub>x</sub> emission rate, rather than each unit complying on an individual-unit basis with the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7. Units with no common owner or operator may not average their emissions. You may submit an averaging plan (or a revision to an approved averaging plan) with the appropriate title V permitting authority(s) at any time up to and including January 1 of the calendar year for which the averaging plan will become effective. If the plan is restricted to units located within a single permitting authority's jurisdiction, you may submit the plan at any time up to and including July 1 of the calendar year for which the plan will become effective.

### STEP 1

Each unit identified for inclusion in the averaging plan in Phase II must be a Group 1 or Group 2 boiler subject to an emission limitation under 40 CFR 76.5, 76.6, or 76.7. Enter each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7 in column (a). If a unit with an alternative emission limitation demonstration period or a final alternative emission limitation under 40 CFR 76.10 participates in an averaging plan, enter the applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7, not the interim or alternative limit, in column (a).

For units utilizing a common stack that are averaging pursuant to 40 CFR 75.17(a)(2)(i)(B), the same alternative contemporaneous emission limitation must be entered in column (b) for each unit utilizing the common stack. Different annual heat input limits may be entered for these units in column (c). Units not utilizing the common stack may also be included in the averaging plan with the common stack units.

The annual heat input limit entered at column (c) will be a minimum limit if the value in column (b) is less than the value in column (a) for that unit. It will be a maximum limit if the value in column (b) is greater than the value in column (a). The values entered for each unit at columns (b) and (c) must satisfy the formula at Step 2.

### STEP 2

The entries in Step 2 must demonstrate that the Btu-weighted annual emission rate averaged over the units in the plan is less than or equal to the Btu-weighted annual average emission rate for the same units if they are each operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7. Use the equation that appears in Step 2 to demonstrate that the alternative contemporaneous annual emission limitations and annual heat input values assigned to the units in Step 1 satisfy this criterion. For units with an interim emission limitation or an alternative emission limitation, the applicable emission limitation for the equation shall equal the applicable emissions limitation under 40 CFR 76.5, 76.6, or 76.7.

### STEP 3

The second option is included to avoid the need to submit identical plans each for a different year if you want each plan to be effective for only one year.

### Paperwork Burden Estimate

The burden on the public for collecting and reporting of information under this request is fixed per response indicated. Send comments regarding this collection of information, including suggestions for reducing the burden, to: Chief, Information Policy Branch (PM-223), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave. NW, Washington, D.C. 20460; and to: Paperwork Reduction Project (OMB#2060-0258), Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. **Do not send your forms to these addresses; see paragraph (4) of the General Instructions on Page 1 for form submission information.**

FORM	HOURS
NO <sub>x</sub> Compliance Plan	10
NO <sub>x</sub> Averaging Plan	200



Facility (Source) Name (from STEP 1)

Dallman

### Permit Requirements

#### STEP 3

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
  - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
  - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (ii) Have an Acid Rain Permit.

### Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

### Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Facility (Source) Name (from STEP 1) <b>Dallman</b>
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**Sulfur Dioxide Requirements, Cont'd.**

- STEP 3, Cont'd.
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
  - (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
  - (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
  - (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

**Nitrogen Oxides Requirements**

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

**Excess Emissions Requirements**

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

**Recordkeeping and Reporting Requirements**

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

Facility (Source) Name (from STEP 1)

Dallman

**Recordkeeping and Reporting Requirements, Cont'd.**

STEP 3, Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
  - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

**Liability**

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

**Effect on Other Authorities**

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

Facility (Source) Name (from STEP 1) <b>Dallman</b>
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**Effect on Other Authorities, Cont'd.**

STEP 3, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

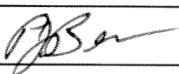
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

**Certification**

STEP 4

Read the certification statement, sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name <b>P.J. Becker / Env. Health &amp; Safety Manager</b>	
Signature 	Date <b>June 13, 2014</b>



## Instructions for the Acid Rain Program Permit Application

*The Acid Rain Program requires the designated representative to submit an Acid Rain permit application for each source with an affected unit. A complete Certificate of Representation must be received by EPA before the permit application is submitted to the title V permitting authority. A complete Acid Rain permit application, once submitted, is binding on the owners and operators of the affected source and is enforceable in the absence of a permit until the title V permitting authority either issues a permit to the source or disapproves the application.*

Please type or print. If assistance is needed, contact the title V permitting authority.

**STEP 1** A Plant Code is a 4 or 5 digit number assigned by the Department of Energy's (DOE) Energy Information Administration (EIA) to facilities that generate electricity. For older facilities, "Plant Code" is synonymous with "ORISPL" and "Facility" codes. If the facility generates electricity but no Plant Code has been assigned, or if there is uncertainty regarding what the Plant Code is, send an email to the EIA. The email address is [EIA-860@eia.gov](mailto:EIA-860@eia.gov).

**STEP 2** In column "a," identify each unit at the facility by providing the appropriate unit identification number, consistent with the identifiers used in the Certificate of Representation and with submissions made to DOE and/or EIA. Do not list duct burners. For new units without identification numbers, owners and operators must assign identifiers consistent with EIA and DOE requirements. Each Acid Rain Program submission that includes the unit identification number(s) (e.g., Acid Rain permit applications, monitoring plans, quarterly reports, etc.) should reference those unit identification numbers in exactly the same way that they are referenced on the Certificate of Representation.

### Submission Deadlines

For new units, an initial Acid Rain permit application must be submitted to the title V permitting authority 24 months before the date the unit commences operation. Acid Rain permit renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a title V permit, or such longer time as provided for under the title V permitting authority's operating permits regulation.

### Submission Instructions

Submit this form to the appropriate title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional Acid Rain contact, or call EPA's Acid Rain Hotline at (202) 343-9620.

### Paperwork Burden Estimate

The public reporting and record keeping burden for this collection of information is estimated to average 8 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Collection Strategies Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, D.C. 20460. Include the OMB control number in any correspondence. **Do not send the completed form to this address.**

10.4 Attachment 4: Compliance Assurance Monitoring Plans

<b>Table 4.1</b>	Emission Units:	Dallman Boilers 31/32 and 33
	Unit-Specific Sections of the Permit:	7.1 and 7.2
	Pollutant:	PM
	Indicator:	Opacity
<u>GENERAL CRITERIA</u>		
	THE MONITORING APPROACH USED TO MEASURE THE INDICATOR:	Continuous Opacity Monitor (COMs)
	THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	20%
	QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:	5% of the Unit Operating Time in a calendar quarter
<u>PERFORMANCE CRITERIA</u>		
	THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:	Performance Specification #1
	VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:	40 CFR 75.14
	QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:	40 CFR 75.14
	THE MONITORING FREQUENCY: <sup>a</sup>	Continuous
	THE DATA COLLECTION PROCEDURES THAT WILL BE USED <sup>a</sup> :	Electronically stored and averaged.
	THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED <sup>a</sup> :	One hour average

<sup>a</sup> As provided by 40 CFR 64.7(c), except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of CAM, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

**Table 4.2A** Emission Unit:  
Unit-Specific Section of the Permit  
Pollutant:

Dallman Boiler 4
7.3
PM (Filterable PM)

Indicators:

Primary Indicator: Filterable PM	Secondary Indicator:* Opacity
* The secondary indicator will be used when the PM CEMS Is not in service.	

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:

Continuous PM Monitor (CMS)	Continuous Opacity Monitor (COMS)
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THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:

Less than or equal to 0.012 lb/mmBtu	Less than or equal to 20 percent
--------------------------------------	----------------------------------

QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:

5% of the Unit Operating Time in a calendar quarter	5% of the Unit Operating Time in a calendar quarter
---	---

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:

Performance Specification 11 (PS-11)	Performance Specification 1
--------------------------------------	-----------------------------

VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:

Measurements reviewed daily, Monitoring status tracked electronically and viewed by control room operators	40 CFR 75.14
--	--------------

QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:

PM Monitor operated, calibrated and maintained in accordance with PS 11	40 CFR 75.14
---	--------------

MONITORING FREQUENCY:

25 minute batch sampling	Continuous operation <sup>a</sup>
--------------------------	-----------------------------------

DATA COLLECTION PROCEDURES:

Electronically recorded and averaged	Electronically recorded and averaged
--------------------------------------	--------------------------------------

THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:

3-hour average	3-hour average
----------------	----------------

<sup>a</sup> "Continuous operation" or "continued operation" shall be as specified by 40 CFR 64.7(c), which among other things, provides that data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of CAM.

**Table 4.2B** Emission Unit:  
Unit-Specific Section of the Permit  
Pollutant:

Dallman Boiler 4
7.3
PM (Filterable PM)

Indicators:

Primary Indicator: Filterable PM	Secondary Indicator:* Opacity
* The secondary indicator will be used when the PM CMS Is not in service.	

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:

Continuous PM Monitor (CMS)	Continuous Opacity Monitor (COMS)
-----------------------------	-----------------------------------

THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:

Less than or equal to 0.10 lb/mmBtu	Less than or equal to 20 percent
-------------------------------------	----------------------------------

QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:

5% of the Unit Operating Time in a calendar quarter	5% of the Unit Operating Time in a calendar quarter
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PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:

Performance Specification 11 (PS-11)	Performance Specification 1
--------------------------------------	-----------------------------

VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:

Measurements reviewed daily, Monitoring status tracked electronically and viewed by control room operators	40 CFR 75.14
--	--------------

QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:

PM Monitor operated, calibrated and maintained in accordance with PS-11	40 CFR 75.14
---	--------------

MONITORING FREQUENCY:

Continuous operation <sup>a</sup> (25 minute batch sampling)	Continuous operation <sup>a</sup>
--	-----------------------------------

DATA COLLECTION PROCEDURES:

Electronically recorded and averaged	Electronically recorded and averaged
--------------------------------------	--------------------------------------

THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:

One-hour average	One-hour average
------------------	------------------

<sup>a</sup> "Continuous operation" or "continued operation" shall be as specified by 40 CFR 64.7(c), which among other things, provides that data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of CAM.

**Table 4.3**

Emission Unit:

Dallman Boiler 4

Unit-Specific Section of the Permit:

7.3

Pollutant:

Sulfuric Acid Mist

Indicator:

WESP - Amperes

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:

Current across second WESP

THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:

Current below 287 mA over a 3-hour average, Notification alarm in control room if current is below 350 mA over a 3 hour average

QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:

5% of the Unit Operating Time in a calendar quarter

PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:

WESP Field amps measured and recorded electronically

VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:

Measurements reviewed daily, Monitoring status tracked electronically and viewed by control room operators

QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:

Measurements reviewed daily, Monitoring status tracked electronically and viewed by control room operators

MONITORING FREQUENCY:

Continuous<sup>a</sup>

THE DATA COLLECTION PROCEDURES THAT WILL BE USED<sup>a</sup>:

Electronically recorded and averaged

THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:

3-hour average

<sup>a</sup> "Continuous operation" or "continued operation" shall be as specified by 40 CFR 64.7(c), which among other things, provides that data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of CAM.

**Table 4.4** Emission Unit:  
Unit-Specific Section of the Permit  
Pollutant:

Dallman Boiler 4
7.3
Total PM*

\* Total PM is the sum of filterable PM and condensable PM.

Indicators:

Indicator 1: Filterable PM	Indicator 2: Sulfuric Acid Mist
Both indicators must be addressed for an excursion.	

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:

See CAM Plan for PM Filterable (Table 4.2A)	See CAM Plan for Sulfuric Acid Mist (Table 4.3)
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THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:

Less than or equal to 0.012 lb/mmBtu	Current below 287 mA, 3-hour average, Notification alarm in control room if current is below 350 mA, 3 hour average
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QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVELS:

See CAM Plan for PM Filterable	See CAM Plan for Sulfuric Acid Mist
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PERFORMANCE CRITERIA

THE SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA:

See CAM Plan for PM Filterable	See CAM Plan for Sulfuric Acid Mist
--------------------------------	-------------------------------------

VERIFICATION PROCEDURES TO CONFIRM THE OPERATIONAL STATUS OF THE MONITORING:

"	"
---	---

QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES THAT ENSURE THE VALIDITY OF THE DATA:

"	"
---	---

MONITORING FREQUENCY:<sup>a</sup>

"	"
---	---

DATA COLLECTION PROCEDURES:

"	"
---	---

THE DATA AVERAGING PERIOD FOR DETERMINING WHETHER AN EXCURSION OR EXCEEDANCE HAS OCCURRED:

3-hour average	3-hour average
----------------	----------------

<sup>a</sup> "Continuous operation" or "continued operation" shall be as specified by 40 CFR 64.7(c), which among other things, provides that data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of CAM.

10.5 Attachment 5 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Official Title: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Date Signed: \_\_\_\_\_

## 10.6 Attachment 6 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, [www.epa.state.il.us](http://www.epa.state.il.us). This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

### Guidance On Revising A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-revising.pdf](http://www.epa.state.il.us/air/caapp/caapp-revising.pdf)

### Guidance On Renewing A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-renewing.pdf](http://www.epa.state.il.us/air/caapp/caapp-renewing.pdf)

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

[www.epa.state.il.us/air/caapp/index.html](http://www.epa.state.il.us/air/caapp/index.html)

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit Form (CAAPP Form-199).

### Application For A Construction Permit Form (CAAPP Form-199):

[www.epa.state.il.us/air/caapp/199-caapp.pdf](http://www.epa.state.il.us/air/caapp/199-caapp.pdf)