

217/785-1705

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

PERMITTEE

City of Springfield  
Attn: Environmental Health and Safety Manager  
Seventh and Monroe  
Springfield, Illinois 62757

Application No.: 95090091                      I.D. No.: 167120AAO  
Applicant's Designation:                      Date Received: September 7, 1995  
Operation of: Electrical Power Generation  
Date Issued: September 29, 2005  
Effective Date: 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

This permit is hereby granted to the above-designated Permittee to operate an electrical power generation station, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

The current federal Acid Rain Permit issued to City of Springfield by the Illinois EPA for this source is incorporated into this CAAPP permit (See Attachment 5).

Revision Date Received: November 3, 2005  
Revision Date Issued: TBD  
Purpose of Revision: Significant Modification

This significant modification to the CAAPP Permit represents certain changes to Permit Conditions, as identified on the next page, resulting from the settlement resolution of an administrative permit appeal filed in 2005 before the Pollution Control Board.

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

Robert W. Bernoteit  
Acting Manager, Permit Section  
Division of Air Pollution Control

RWB:KKD:psj

cc: Illinois EPA, FOS, Region 2  
USEPA

<sup>1</sup> Except as addressed in Condition 8.7 of this permit.

Conditions changed by Significant Modification:

5.2.7  
5.6.1  
5.7.2  
5.9  
7.1.5(c)  
7.1.5(d)  
7.1.5(e)  
7.1.6(a)  
7.1.7(b)(iii)  
7.1.8(e)  
7.1.9(c)(ii) and (iii)(B)  
7.1.9(f)(i)  
7.1.9(f)(ii)  
7.1.9(g)(ii)(D)(III)  
7.1.9(i)  
7.1.10-2(a)(i)(D)  
7.1.10-2(a)(i)(E)  
7.1.10-2(h)  
7.1.10-3(a)(i)  
7.2.5(d)  
7.2.5(e)  
7.2.5(f)  
7.2.6(a)  
7.2.7(b)(iii)  
7.2.8(e)  
7.2.9(c)(ii) and (iii)(B)  
7.2.9(f)(i)  
7.2.9(f)(ii)  
7.2.9(i)  
7.2.9(g)(ii)(D)(III)  
7.2.10-2(a)(i)(D)  
7.2.10-2(a)(i)(E)  
7.2.10-2(h)  
7.2.10-3(a)(i)  
7.3.5(b)  
7.3.8  
7.3.9(b)(ii) and (iii)  
7.3.10(a)(i)(A)  
7.4.5(a)  
7.4.8  
7.4.9(b)(iii) and (iv)  
7.4.10(a)(i)(A)  
7.5.5(a)  
7.5.10(a)(i)(A)  
7.6.5(a)  
7.6.8  
7.6.9(b)(iii) and (iv)  
7.6.10(a)(i)(A)  
7.7.5(c)  
7.7.10-1(a)(i)(A)

Attachment 6

TABLE OF CONTENTS

	<u>PAGE</u>
1.0 INTRODUCTION	5
1.1 Source Identification	
1.2 Owner/Parent Company	
1.3 Operator	
1.4 General Source Description	
1.5 Title I Conditions	
2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	7
3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES	8
3.1 Identification of Insignificant Activities	
3.2 Compliance with Applicable Requirements	
3.3 Addition of Insignificant Activities	
4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE	11
5.0 OVERALL SOURCE CONDITIONS	12
5.1 Applicability of Clean Air Act Permit Program (CAAPP)	
5.2 Applicable Regulations	
5.3 General Non-Applicability of Regulations of Concern	
5.4 Source-Wide Operational and Production Limits and Work Practices	
5.5 Source-Wide Emission Limitations	
5.6 General Recordkeeping Requirements	
5.7 General Reporting Requirements	
5.8 General Operational Flexibility/Anticipated Operating Scenarios	
5.9 Application Submittal(s) Requirements	
6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS	18
6.1 NO <sub>x</sub> Trading Program	
6.2 Acid Rain Program	
7.0 UNIT SPECIFIC CONDITIONS	29
7.1 Coal Fired Boilers	
7.2 Coal Fired Boiler - Subject to 40 CFR 60 Subpart D	
7.3 Coal Handling Equipment	
7.4 Coal Processing Equipment	
7.5 Fly Ash Equipment	
7.6 Limestone and Gypsum Handling Equipment	
7.7 Engines	
7.8 Storage Tank	



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.: 167100AAO  
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

City Water, Light & Power operates five 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 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. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and 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, as well as Titles II and X of the Act. (See also Condition 8.7.)

2.0 LIST OF ABBREVIATIONS AND ACRONYMS USED IN THIS PERMIT

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
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
EGU	electrical generating unit(s)
Gal	Gallon
HAP	Hazardous Air Pollutant
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
Kw	Kilowatts
LAER	Lowest Achievable Emission Rate
Lb	Pound
MACT	Maximum Achievable Control Technology
mmBtu	Million British thermal units
MW	Megawatts
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
ppm	parts per million
PSD	Prevention of Significant Deterioration (40 CFR 52.21)
RMP	Risk Management Plan
SO <sub>2</sub>	Sulfur Dioxide
T	ton (2000 pounds)
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

### 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:

Auxiliary Boiler

- 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  
Limestone Ball Mills

- 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 and 212.123 (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.

### 3.3 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 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Emission Control Equipment	Ref*
Lakeside Boiler 7 BLR 7	Babcock and Wilcox Boiler Nominal 415 mmBtu/hr (1959)	ESP	7.1
Lakeside Boiler 8 BLR 8	Babcock and Wilcox Boiler Nominal 415 mmBtu/hr (1964)	ESP	
Dallman Boiler 1 BLR 31	Babcock and Wilcox Boiler Nominal 882 mmBtu/hr (1968)	Individual ESPs and shared SCR and FGD	
Dallman Boiler 2 BLR 32	Babcock and Wilcox Boiler Nominal 882 mmBtu/hr (1972)		
Dallman Boiler 3 BLR 33	Combustion Engineering Boiler Nominal 2,120 mmBtu/hr (1975)	SCR, ESP and FGD	7.2
Coal Handling Equipment	Coal Receiving, Transfer and Storage Operations	Enclosure, Covers, and Dust Suppressant Application System	7.3
Crusher 1CR2	Coal Crushing Operation	Enclosures and Covers, Dust Suppressant Application and Dust Collection Devices	7.4
Fly Ash Equipment	Transfer System, Silo, and Loadout Operation	Enclosures and Dust Collection Devices	7.5
Limestone and Gypsum Handling Equipment	Receiving, Transfer, Storage, and Loadout Operation	Enclosures and Dust Collection Devices	7.6
Engine 1 ENG1	Distillate Oil Fired Engine	None	7.7
Engine 2 ENG2	Distillate Oil Fired Engine	None	
Engine 3 ENG3	Distillate Oil Fired Engine	None	
Tank T1	Gasoline Storage Tank Capacity 1,000 Gallon	Submerged Loading Pipe	7.8

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

## 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.
  - b. 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 the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

Note: As a new fuel combustion emission unit with a heat input capacity greater than 250 mmBtu/hr, Boiler 33 (Dallman Boiler 3) is subject to 35 IAC 212.122, which sets a limit on its opacity of 20 percent.

#### 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)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal rules for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all applicable requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

Note: This condition is imposed pursuant to 40 CFR 68.215(a).

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 owner or operator 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 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If an operational change occurs at the source that invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.

5.3 General Non-Applicability of Regulations of Concern

None

Note: For individual emissions units and groups of units, non-applicability of regulations is addressed in Section 7 of this permit.

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

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.)

## 5.6 General Recordkeeping Requirements

### 5.6.1 Records for Emissions

The Permittee shall maintain records for the source to prepare its Annual Emission Report pursuant to 39.5(7)(b) of the Act.

### 5.6.2 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) and (f) 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.)

## 5.7 General Reporting Requirements

### 5.7.1 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.

#### 5.7.2 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 [39.5(7)(a), (b) and (f) of the Act].

#### 5.8 General Operational Flexibility/Anticipated Operating Scenarios

None

Note: For individual emissions units or groups of similar emission units, operation flexibility and anticipated operating scenarios are addressed in Section 7 of this permit.

#### 5.9 Submittal of Information for Permit Reopening

The Permittee shall promptly submit information to assist the Illinois EPA in a reopening of the CAAPP permit in accordance with Section 39.5(15)(a)(i) of the Act and 35 IAC 270.503(a)(1), as follows:

- 5.9.1 Unless the CAAPP permit has been reopened at the time of issuance of this permit, Permittee shall submit to the Illinois EPA the following information, as part of a revised CAAPP application, within 30 days of permit issuance:
  - a. An identification of all additional Clean Air Act requirements that have become applicable to the source since September 29, 2005. Such identification shall adhere to the definition of "applicable Clean Air Act requirement" set forth at

Section 39.5(1) of the Act, including any term or condition of a Title I preconstruction permit and other such designated requirement(s) promulgated under the federal Clean Air Act.

- b. For any requirement identified in Condition 5.9.1(a) for which the source does not currently comply:
  - i. An identification of such requirement and the affected emission unit(s) subject to the requirement;
  - ii. The nature of the noncompliance (i.e., continuous or intermittent);
  - iii. An explanation of the source's failure to comply with the requirement; and
  - iv. A proposed compliance plan and schedule for the noncompliant emission unit(s) (i.e., Form 294 CAAPP).

## 6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

### 6.1 NO<sub>x</sub> Trading Program

#### 6.1.1 Description of NO<sub>x</sub> Trading Program

The NO<sub>x</sub> Trading Program is a regional "cap and trade" market system for large sources of NO<sub>x</sub> emissions in the eastern United States, including Illinois. It is designed to reduce and maintain NO<sub>x</sub> emissions from the emission units covered by the program within a budget to help contribute to attainment and maintenance of the ozone ambient air quality standard in the multi-state region covered by the program. The NO<sub>x</sub> Trading Program applies in addition to other applicable requirements for NO<sub>x</sub> emissions and in no way relaxes these other requirements.

Electrical generating units (EGU) that are subject to the NO<sub>x</sub> Trading Program are referred to as "budget EGU". Sources that have one or more EGU or other units subject to the NO<sub>x</sub> Trading Program are referred to as budget sources.

The NO<sub>x</sub> Trading Program controls NO<sub>x</sub> emissions from budget EGU and other budget units during a seasonal control period from May 1 through September 30 of each year, when weather conditions are conducive to formation of ozone in the ambient air. By November 30 of each year, the allowance transfer deadline, each budget source must hold "NO<sub>x</sub> allowances" for the actual NO<sub>x</sub> emissions of its budget units during the preceding control period. The USEPA will then retire NO<sub>x</sub> allowances in the source's accounts in amounts equivalent to its seasonal emissions. If a source does not have sufficient allowances in its accounts, USEPA would subtract allowances from the source's future allocation for the next control period and impose other penalties as appropriate. Stringent monitoring procedures developed by USEPA apply to budget units to assure that actual emissions of NO<sub>x</sub> are accurately determined.

The number of NO<sub>x</sub> allowances available for budget sources is set by the overall budget for NO<sub>x</sub> emissions established by USEPA. This budget requires a substantial reduction in NO<sub>x</sub> emissions from historical levels as necessary to meet air quality goals. In Illinois, existing budget sources initially receive their allocation or share of the NO<sub>x</sub> allowances budgeted for EGU in an amount determined by rule [35 IAC Part 217, Appendix F]. Between 2007 and 2011, the allocation mechanism for existing EGU gradually shifts to one based on the actual operation of EGU in preceding control

periods. New budget EGU, for which limited operating data may be available, may obtain NO<sub>x</sub> allowances from the new source set-aside (NSSA), a portion of the overall budget reserved for new EGU.

In addition to directly receiving or purchasing NO<sub>x</sub> allowances as described above, budget sources may transfer NO<sub>x</sub> allowances from one of their units to another. They may also purchase allowances in the marketplace from other sources that are willing to sell some of the allowances that they have received. Each budget source must designate an account representative to handle all its allowance transactions. The USEPA, in a central national system, will maintain allowance accounts and record transfer of allowances among accounts.

The ability of sources to transfer allowances will serve to minimize the costs of reducing NO<sub>x</sub> emissions from budget units to comply with the overall NO<sub>x</sub> budget. In particular, the NO<sub>x</sub> emissions of budget units that may be most economically controlled will be targeted by sources for further control of emissions. This will result in a surplus of NO<sub>x</sub> allowances from those units that can be transferred to other units at which it is more difficult to control NO<sub>x</sub> emissions. Experience with reduction of sulfur dioxide emissions under the federal Acid Rain program has shown that this type of trading program not only achieves regional emission reductions in a more cost-effective manner but also results in greater overall reductions than application of traditional emission standards to individual emission units.

The USEPA developed the plan for the NO<sub>x</sub> Trading Program with assistance from affected states. Illinois' rules for the NO<sub>x</sub> Trading Program for EGU are located at 35 IAC Part 217, Subpart W, and have been approved by the USEPA. These rules provide for interstate trading, as mandated by Section 9.9 of the Act. Accordingly, these rules refer to and rely upon federal rules at 40 CFR Part 96, which have been developed by USEPA for certain aspects of the NO<sub>x</sub> Trading Program, and which an individual state must follow to allow for interstate trading of allowances.

Note: This narrative description of the NO<sub>x</sub> Trading Program is for informational purposes only and is not enforceable.

#### 6.1.2 Applicability

- a. The following emission units at this source are existing budget EGU for purposes of the NO<sub>x</sub> Trading Program. Accordingly, this source is a budget

source and the Permittee is the owner or operator of a budget source and budget EGU. In this section of this permit, these units are addressed as budget EGU.

Boilers 31, 32, 33, 7, and 8

- b. This permit does not provide "low-emitter status" for the above emission units pursuant to 35 IAC 217.754(c).

#### 6.1.3 General Provisions of the NO<sub>x</sub> Trading Program

- a. This source and the budget EGU at this source shall comply with all applicable requirements of Illinois' NO<sub>x</sub> Trading Program, i.e., 35 IAC Part 217, Subpart W, and 40 CFR Part 96 (excluding 40 CFR 96.4(b) and 96.55(c), and excluding 40 CFR 96, Subparts C, E, and I), pursuant to 35 IAC 217.756(a) and 217.756(f)(2).
- b. Any provision of the NO<sub>x</sub> Trading Program that applies to a budget source (including any provision applicable to the account representative of a budget source) shall also apply to the owner and operator of such budget source and to the owner and operator of each budget EGU at the source, pursuant to 35 IAC 217.756(f)(3).
- c. Any provision of the NO<sub>x</sub> Trading Program that applies to a budget EGU (including any provision applicable to the account representative of a budget EGU) shall also apply to the owner and operator of such budget EGU. Except with regard to requirements applicable to budget EGUs with a common stack under 40 CFR 96, Subpart H, the owner and operator and the account representative of one budget EGU shall not be liable for any violation by any other budget EGU of which they are not an owner or operator or the account representative, pursuant to 35 IAC 217.756(f)(4).

#### 6.1.4 Requirements for NO<sub>x</sub> Allowances

- a. Beginning in 2004, by November 30 of each year, the allowance transfer deadline, the account representative of each budget EGU at this source shall hold allowances available for compliance deduction under 40 CFR 96.54 in the budget EGU's compliance account or the source's overdraft account in an amount that shall not be less than the budget EGU's total tons of NO<sub>x</sub> emissions for the preceding control period, rounded to the nearest whole ton, as determined in accordance with 40 CFR 96, Subpart H,

plus any number necessary to account for actual utilization (e.g., for testing, start-up, malfunction, and shut down) under 40 CFR 96.42(e) for the control period, pursuant to 35 IAC 217.756(d)(1). For purposes of this requirement, an allowance may not be utilized for a control period in a year prior to the year for which the allowance is allocated, pursuant to 35 IAC 217.756(d)(5).

- b. The account representative of a budget EGU that has excess emissions in any control period, i.e., NO<sub>x</sub> emissions in excess of the number of NO<sub>x</sub> allowances held as provided above, shall surrender allowances as required for deduction under 40 CFR 96.54(d)(1), pursuant to 35 IAC 201.756(f)(5). In addition, the owner or operator of a budget EGU that has excess emissions shall pay any fine, penalty, or assessment, or comply with any other remedy imposed under 40 CFR 96.54(d)(3) and the Act, pursuant to 35 IAC 217.756(f)(6). Each ton of NO<sub>x</sub> emitted in excess of the number of NO<sub>x</sub> allowances held as provided above for each budget EGU for each control period shall constitute a separate violation of 35 IAC Part 217 and the Act, pursuant to 35 IAC 217.756(d)(2).
- c. An allowance allocated by the Illinois EPA or USEPA under the NO<sub>x</sub> Trading Program is a limited authorization to emit one ton of NO<sub>x</sub> in accordance with the NO<sub>x</sub> Trading Program. As explained by 35 IAC 217.756(d)(6), no provisions of the NO<sub>x</sub> Trading Program, the budget permit application, the budget permit, or a retired unit exemption under 40 CFR 96.5 and no provision of law shall be construed to limit the authority of the United States or the State of Illinois to terminate or limit this authorization. As further explained by 35 IAC 217.756(d)(7), an allowance allocated by the Illinois EPA or USEPA under the NO<sub>x</sub> Trading Program does not constitute a property right. As provided by 35 IAC 217.756(d)(4), allowances shall be held in, deducted from, or transferred among allowances accounts in accordance with 35 IAC Part 217, Subpart W, and 40 CFR 96, Subparts F and G.

#### 6.1.5 Monitoring Requirements for Budget EGU

- a. The Permittee shall comply with the monitoring requirements of 40 CFR Part 96, Subpart H, for each budget EGU and the compliance of each budget EGU with the emission limitation under Condition 6.1.4(a) shall be determined by the emission measurements recorded and reported in accordance

with 40 CFR 96, Subpart H, pursuant to 35 IAC 217.756(c)(1), (c)(2) and (d)(3).

i. For BLR 31, BLR 32, BLR33, BLR 7, and BLR 8, the Permittee is conducting continuous emissions monitoring for NO<sub>x</sub>, as generally provided for by 40 CFR 75.71(a).

b. The account representative for the source and each budget EGU at the source shall comply with those sections of the monitoring requirements of 40 CFR 96, Subpart H, applicable to an account representative, pursuant to 35 IAC 217.756(c)(1) and (d)(3).

#### 6.1.6 Recordkeeping Requirements for Budget EGU

Unless otherwise provided below, the Permittee 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 5-year period may be extended for cause at any time prior to the end of the 5 years, in writing by the Illinois EPA or the USEPA.

a. The account certificate of representation of the account representative for the source and each budget EGU at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 40 CFR 96.13, as provided by 35 IAC 217.756(e)(1)(A). These certificates and documents must be retained on site at the source for at least 5-years after they are superseded because of the submission of a new account certificate of representation changing the account representative.

b. All emissions monitoring information, in accordance with 40 CFR 96, Subpart H, (provided that to the extent that 40 CFR 96, Subpart H, provides for a 3-year period for retaining records, the 3-year period shall apply), pursuant to 35 IAC 217.756(e)(1)(B).

c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO<sub>x</sub> Trading Program or documents necessary to demonstrate compliance with requirements of the NO<sub>x</sub> Trading Program, pursuant to 35 IAC 217.756(e)(1)(C).

d. Copies of all documents used to complete a budget permit application and any other submission under the NO<sub>x</sub> Trading Program, pursuant to 35 IAC 217.756(e)(1)(D).

6.1.7 Reporting Requirements for Budget EGU

- a. The account representative for this source and each budget EGU at this source shall submit to the Illinois EPA and USEPA the reports and compliance certifications required under the NO<sub>x</sub> Trading Program, including those under 40 CFR 96, Subparts D and H, and 35 IAC 217.774, pursuant to 35 IAC 217.756(e)(2).
- b. Notwithstanding the provisions in Conditions 9.8 and 9.9 of this CAAPP permit, these submittals need only be signed by the designated representative, who may serve in place of the responsible official for this purpose, as provided by Section 39.5(1) of the Act, and submittals to the Illinois EPA need only be made to the Illinois EPA, Air Compliance Section.

6.1.8 Allocation of NO<sub>x</sub> Allowances to Budget EGU

- a. As the budget EGU identified in Condition 6.1.2(a) are "existing" EGU listed in 35 IAC Part 217, Appendix F, these EGU are entitled to NO<sub>x</sub> allowances as follows. (The portion of Appendix F that applies to the Permittee is provided in Condition 6.1.10.) The number of NO<sub>x</sub> allowances actually allocated for the budget EGU shall be the number of NO<sub>x</sub> allowances issued by USEPA pursuant to the allocation information reported to it by the Illinois EPA, which information may reflect adjustments to the overall allocations to budget EGU as provided for by 35 IAC 217.760(b) and (c):
  - i. In 2004 through 2006 (the first three years of the NO<sub>x</sub> Trading Program), an annual allocation of NO<sub>x</sub> allowances as specified by 35 IAC 217.764(a)(1), i.e., the number of NO<sub>x</sub> allowances listed in Appendix F, Column 7, and as provided by 35 IAC 217.768(j), a pro-rata share of any NO<sub>x</sub> allowances remaining in the new source set-aside (NSSA) following the allocation of allowances to new budget EGU.
  - ii. In 2007, as provided by 35 IAC 217.764(b), an allocation of NO<sub>x</sub> allowances as specified by 35 IAC 217.764(b)(1), i.e., the number of NO<sub>x</sub> allowances listed in Appendix F, Column 8, and as provided by 35 IAC 217.764(b)(4), a pro-rata share of any NO<sub>x</sub> allowances remaining after the allocation of allowances pursuant to 35 IAC 217.764(b)(2) to budget EGU that commence operation between January 1, 1995 and April 30, 2003.

- iii. In 2008, as provided by 35 IAC 217.764(c), a specified allocation of NO<sub>x</sub> allowances, i.e., the number of NO<sub>x</sub> allowances listed in Appendix F, Column 8, and, as provided by 35 IAC 217.764(c)(4), a pro-rata share of any NO<sub>x</sub> allowances remaining after the allocation of allowances to budget EGU that commence operation between January 1, 1995 and April 30, 2004.
  - iv. In 2009, as provided by 35 IAC 217.764(d), a specified allocation of NO<sub>x</sub> allowances, i.e., the number of NO<sub>x</sub> allowances listed in Appendix F, Column 9, and as provided by 35 IAC 217.764(d)(4), a pro-rata share of any NO<sub>x</sub> allowances remaining after the allocation of NO<sub>x</sub> allowances to budget EGU that commence operation between January 1, 1995 and April 30, 2005, and as provided by 35 IAC 217.764(d)(6), a pro-rata share of any surplus of NO<sub>x</sub> allowances in the NSSA after the allocation of NO<sub>x</sub> allowances to new budget EGU pursuant to 35 IAC 217.764(d)(5).
  - v. In 2010, as provided by 35 IAC 217.764(e), a specified allocation of NO<sub>x</sub> allowances, i.e., the number of NO<sub>x</sub> allowances listed in Appendix F, Column 9, and a pro-rata share of any NO<sub>x</sub> allowances remaining after the allocation of NO<sub>x</sub> allowances to budget EGU that commence operation between January 1, 1995 and April 30, 2006, and a pro-rata share of any surplus of NO<sub>x</sub> allowances in the NSSA following the allocation of NO<sub>x</sub> allowances to new budget EGU.
  - vi. In 2011 and annually thereafter, as provided by 35 IAC 217.764(f), an allocation of NO<sub>x</sub> allowances based on the prior operation of the EGU during previous control periods, as described in Condition 6.1.8(b), and a pro-rata share of any surplus of NO<sub>x</sub> allowances in the NSSA following the allocation of NO<sub>x</sub> allowances to new budget EGU.
- b. In accordance with 35 IAC 217.762, the theoretical number of NO<sub>x</sub> allowances for the budget EGU listed in Condition 6.1.2(a), calculated as the product of the applicable NO<sub>x</sub> emissions rate and heat input as follows, shall be the basis for determining the pro-rata share of NO<sub>x</sub> allowances for the budget EGU and the allocation of NO<sub>x</sub> allowances to the budget EGU based on their prior operation:

- i. The applicable NO<sub>x</sub> emission rate for the budget EGU shall be 0.15 lb/mmBtu, as specified by 35 IAC 217.762(a)(1).
- ii. The applicable heat input (mmBtu/control period) shall be the average of the two highest heat inputs from the control periods four to six years prior to the year for which the allocation is being made, as provided by 35 IAC 217.762(b)(1).

6.1.9 Budget Permit Required by the NO<sub>x</sub> Trading Program

- a. For this source, this segment of the CAAPP Permit, i.e., Section 6.1, is the Budget Permit required by the NO<sub>x</sub> Trading Program and is intended to contain federally enforceable conditions addressing all applicable NO<sub>x</sub> Trading Program requirements. This Budget Permit shall be treated as a complete and segregable portion of the source's entire CAAPP permit, as provided by 35 IAC 217.758(a)(2).
- b. The Permittee and any other owner or operator of this source and each budget EGU at the source shall operate the budget EGU in compliance with this Budget Permit, pursuant to 35 IAC 217.756(b)(2).
- c. No provision of this Budget Permit or the associated application shall be construed as exempting or excluding the Permittee, or other owner or operator and, to the extent applicable, the account representative of a budget source or budget EGU from compliance with any other regulation or requirement promulgated under the CAA, the Act, the approved State Implementation Plan, or other federally enforceable permit, pursuant to 35 IAC 217.756(g).
- d. Upon recordation by USEPA under 40 CFR 96, Subpart F or G, or 35 IAC 217.782, every allocation, transfer, or deduction of an allowance to or from the budget units' compliance accounts or to or from the overdraft account for the budget source is deemed to amend automatically, and become part of, this budget permit, pursuant to 35 IAC 217.756(d)(8). This automatic amendment of this budget permit shall be deemed an operation of law and will not require any further review.
- e. No revision of this Budget Permit shall excuse any violation of the requirements of the NO<sub>x</sub> Trading Program that occurs prior to the date that the revisions to this permit takes effect, pursuant to 35 IAC 217.756(f)(1).

f. The Permittee, or other owner or operator of the source, shall reapply for a Budget Permit for the source as required by 35 IAC Part 217, Subpart W and Section 39.5 of the Act. For purposes of the NO<sub>x</sub> Trading Program, the application shall contain the information specified by 35 IAC 217.758(b)(2).

6.1.10 References

35 IAC Part 217 Appendix F (provisions applicable to the Permittee)

Company Name/ I.D. No.	Generating Unit	EGU	NO <sub>x</sub> Budget Allowances	80% of NO <sub>x</sub> Budget Allowances	50% of NO <sub>x</sub> Budget Allowances	2004, 2005, 2006 Allowances	2007, 2008 Allowances	2009, 2010 Allowances
1	2	3	4	5	6	7	8	9
167120AAO	Dallman 1	Boiler 31	141	113	71	134	111	69
167120AAO	Dallman 2	Boiler 32	202	162	101	192	158	99
167120AAO	Dallman 3	Boiler 33	474	379	237	450	372	232
167120AAO	Lakeside 7	Lakeside 7	47	38	24	45	37	23
167120AAO	Lakeside 8	Lakeside 8	42	34	21	40	33	21

## 6.2 Acid Rain Program

### 6.2.1 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:

Boilers 31, 32, 33, 7, and 8

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.

### 6.2.2 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 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.

### 6.2.3 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. [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)

#### 6.2.4 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 5 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, revision 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.

#### 6.2.5 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]

## 7.0 UNIT SPECIFIC CONDITIONS

### 7.1 Coal Fired Boilers

#### 7.1.1 Description

The Permittee operates four older coal-fired boilers for electric generation. The two oldest boilers (Boiler 7 and 8) are located in the Lakeside area of the plant and share a single stack. The two other boilers (Boiler 31 and 32) are located in the Dallman area of the plant and also share a stack. These four boilers also have the capability to fire at various modes such as combination of coal, natural gas and/or fuel oil as their principal fuel. In addition to coal, these boilers fire fuel oil 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, 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.

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

Unit I.D.	Description	Emission Control Equipment	Stack I.D.
Boiler BLR 7	Babcock and Wilcox Boiler Nominal 415 mmBtu/hr (1959)	ESP	LSS
Boiler BLR 8	Babcock and Wilcox Boiler Nominal 415 mmBtu/hr (1964)	ESP	LSS
Boiler BLR 31	Babcock and Wilcox Boiler Nominal 882 mmBtu/hr (1968)	SCR, ESP and FGD	DS1
Boiler BLR 32	Babcock and Wilcox Boiler Nominal 882 mmBtu/hr (1972)	SCR, ESP and FGD	DS1

#### 7.1.3 Applicability Provisions

- a. An "affected boiler" for the purpose of these unit-specific conditions, is a boiler described in Conditions 7.1.1 and 7.1.2.
- 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 212.203), 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 affected boilers shall comply with the standard in Condition 5.2.2(b) [35 IAC 212.123], which addresses the opacity of the emission of smoke or other particulate matter from the affected boilers.
- 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 (which is addressed in Section 7.2.4 of this permit) shall not exceed 32,797 lb/hour, pursuant to 35 IAC 214.143, 214.182, and 214.184. These are the SO<sub>2</sub> emissions allowed by the following formula in 35 IAC 214.184, as selected by the Permittee:

$$E = 0.2222 H^2$$

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

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.

$P_i$  = Percentage of total emissions E emitted from emission unit i divided by 100. (Note:  $P_1 + P_2 + \dots + P_n = 1$ )

$H_i$  = 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), and 300 ft (Boilers 7 and 8) ft, but the GEP height is 211 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 a NO<sub>x</sub> emission standard pursuant to Section 407 of the Clean Air Act and 40 CFR Part 76, as addressed in Condition 6.2 and Attachment 5 of this permit.
- f. 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 a 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 lbs/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(c) and (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.

#### 7.1.5 Non-Applicability of Regulations of Concern

- a. 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 lb/hr, allowed by the formula in 35 IAC 212.207. For this purpose, the applicable PM standard for heat input from liquid fuel shall be 0.1 lb/mmBtu, pursuant to 35 IAC 212.206 and 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 lb/hr, allowed by the formula in 35 IAC 214.162. For this purpose, the applicable SO<sub>2</sub> standards for heat input from residual fuel oil and distillate fuel oil shall be 1.0 and 0.3 lb/mmBtu, respectively, pursuant to 35 IAC 214.161(a), 214.161(b), and 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 and/or fuel oil 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 and/or fuel oil 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 (CAM) for Major Stationary Sources for SO<sub>2</sub> and NO<sub>x</sub> Acid Rain Requirements, because the affected boilers are subject to 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, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for SO<sub>2</sub> and NO<sub>x</sub> State Rule Requirements because the affected boilers are subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method, pursuant to 40 CFR 64.2(b)(1)(vi).

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

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

a. As part of its operation and maintenance of the affected boilers, the Permittee shall perform a "combustion evaluation" on each boiler at least semi-annually, pursuant to Section 39.5(7)(d) of the Act. This evaluation shall, at a minimum, consist of process measurements of the concentration of CO in the flue gas of the affected boiler as well as any adjustments and/or preventative-corrective

measures undertaken to maintain efficient combustion.

7.1.7 Testing Requirements

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:

- a. i. PM emission measurements shall be made no later than two years after the effective date of this condition. (Measurements made after December 31, 2003 may satisfy this requirement.)
- ii. 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 5 MW or 2 percent (whichever is greater) 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).
- iii. 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.
- iv. 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).
- v.
- A. If standard fuel (i.e., coal, fuel oil, and gas) is less than 97.0 percent by weight of the fuel supply to a boiler during a quarter, the Permittee shall have measurements of PM and CO emissions from the boiler made during the next quarter while firing alternative fuel or process waste in the boiler.
  - B. The Permittee shall conduct such measurements while firing the boiler

with at least 1.25 times the greatest percentage of alternative fuel material or process waste in the calendar quarter that triggered the testing. This percentage at which testing shall be conducted shall not exceed that allowed by the maximum design capacity of the alternative fuel handling system. If the boiler has been firing a mix of alternative fuel materials or process wastes, 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 and process wastes burned in a boiler during a quarter is more than the percentage of such material in the fuel supply to the boiler when previous emission measurements were conducted.
- vi. 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. These measurements shall be performed at the 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 the results typify both boilers. If the operation of the affected 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 test methods and procedures shall be used for these measurements. Refer to 40 CFR 60, Appendix A for USEPA Methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter (PM)	USEPA Methods 5
Carbon Monoxide (CO)	USEPA 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).
  - 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 limits 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 and opacity, along with a computerized data acquisition and handling system for collected data. (See also Condition 6.2.3) 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 Attachment 6, pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the owner or operator 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 owner or operator 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, gas or oil), 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. Amount of coal consumed (tons/quarter).  
B. Amount of each other fuel material consumed (tons, gallons, cubic feet per quarter, as appropriate).
- 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 records 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 (Boilers 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.

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 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.
  - B. Each three-hour block averaging period when the average opacity of the affected boiler Lakeside 7 or 8 boilers was above 30%, measured opacity (three-hour block average) , with date, time, operating condition if startup, malfunction, breakdown, or shutdown, further explanation of the incident, and whether particulate matter emissions may have exceeded the limit of Condition 7.1.4(b), with explanation.

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 Condition 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> (lb/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, exceeded 32,797 lb/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 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 Condition 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.
    - 1. Date, time and duration of the startup.
    - 2. 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.
  - 1. Identification of the applicable standard(s) that were or may have been exceeded.
  - 2. An explanation of the nature of such exceedance(s), including the magnitude of such excess emissions.
  - 3. A description of the actions taken or to be taken to minimize the magnitude and duration of excess emissions.
  - 4. 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.
  - 1. A description of the events that led up to the extended startup duration.
  - 2. The reason(s) for the extended startup duration.
  - 3. An explanation of the consequences of the prolonged startup as it relates to the magnitude of emissions, including,
    - I. The actions taken to minimize emissions and the duration of the startup, and

II. 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 7.2.9(b)(i), the Permittee shall also list the reason for the activities that are performed.
- ii. Records for each incident when operation of 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:

1. A detailed explanation why continued operation of the affected boiler was necessary.
2. 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.
3. An explanation 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 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 6.3.3]

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 (f) 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 Condition 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).
  - 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, 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 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 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 7.1.10-2(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. Summary 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). When no excess opacity occurred or the continuous opacity monitoring system was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.
- ii. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative, if requested by the Illinois EPA or the opacity monitoring system downtime was more than 5 percent of the total operating time for an affected boiler during the quarter.
- 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:

1. The percent opacity for each six-minute period.
  2. The start and stop time of each six-minute period in excess of the limitation.
- D. A detailed explanation of 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. A detailed explanation of corrective actions and actions taken to lessen the opacity.
- F. Identification of the 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. A summary of the records required by Condition 7.1.9(g)(ii) 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(f), 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:

1. 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.

2. 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).

3. 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.

4. 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:

1. 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).
2. 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).
3. 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 6.2.3] Pursuant to Section 39.5(17)(m) of the Act, the designated representative of the source must concurrently submit to the Illinois EPA in the

same electronic format specified by the USEPA, the data and information submitted to USEPA on a quarterly basis pursuant to 40 CFR 75.64.

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 Condition 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 is 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. Other process wastes generated at the source in addition to used oil and boiler cleaning residue.
- ii. Alternative fuels that do not constitute waste and were not generated from municipal waste or hazardous waste, such as petroleum coke, tire derived fuel (as defined at Section 54.10b of the Act), clean lumber and wood waste (as defined at 40 CFR 60.2265), shredded polyethylene agricultural containers, and seed corn, provided that such materials are shipped to the source in homogeneous form prepared for use as fuel (e.g., a shipment of tire derived fuel).

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 10 seconds apart, or a record of 1-minute average opacity data determined from six 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(f) is addressed by the continuous emissions monitoring and recordkeeping required by Conditions 7.1.7(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 - Subject to NSPS, 40 CFR 60, Subpart D

7.2.1 Description

The Permittee operates a third coal-fired boiler for electric generation in the Dallman area of the plant, which is served by its own stack. This boiler was built in 1975 and has a nominal capacity of 2120 mmBtu/hour. This boiler also has the capability to fire at various modes such as combination of coal, natural gas and/or fuel oil as their principal fuel. In addition to coal, this boiler fires fuel oil as 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.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Unit I.D.	Description	Control Equipment
Boiler 33 (Dallman 3)	Combustion Engineering Boiler Nominal 2,120 mmBtu/hr (1975)	SCR, ESP and FGD

7.2.3 Applicability Provisions

- a. i. The "affected boiler" 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), 7.2.4(c) (35 IAC 212.204), Condition 7.2.4(d) (35 IAC 214.121), Condition 7.2.4(e) (35 IAC 216.121), and Condition 7.2.4(f) (35 IAC 217.121(d)) 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.
  - 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 an affected boiler in violation of the applicable requirements of Condition 7.2.4(b) (35 IAC 212.122), 7.2.4(c) (35 IAC 212.204), Condition 7.2.4(d) (35 IAC 214.121), Condition 7.2.4(e) (35 IAC 216.121), and Condition 7.2.4(f) (35 IAC 217.121(d)) in the event of a malfunction or breakdown of an 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.

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 60.7(a) the above emission limitations 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 emission of SO<sub>2</sub> from the affected boiler shall not exceed 1.2 lb/mmBtu, pursuant to 35 IAC 214.121.
- e. 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.
- f. The emissions of NO<sub>x</sub> from the affected boiler shall not exceed 0.7 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 217.121(d).
- g. 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 a 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 lbs/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(c) and (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(g)(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(g).

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.

7.2.5 Non-Applicability of Regulations of Concern

- a. i. This permit is issued based on the affected boiler not being subject to the NSPS standards for firing of oil i.e., 40 CFR 60.43(a)(1) for SO<sub>2</sub> and 40 CFR 60.44(a)(2) for NO<sub>x</sub>, when the boiler is considered to be using solid fuel (coal) as its principal fuel and distillate fuel oil is only used in incidental amounts for specific purposes, such as startup, opacity reduction emission mitigation, flame stabilization, or other temporary interruption in solid fuel supply, as associated with routine firing of solid 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. 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.
  - C. 35 IAC 217.121(e).
- 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 7.2.5(b)(ii)(A) shall substitute for Condition 7.2.4(c); for SO<sub>2</sub>, Condition

7.2.5(b)(ii)(B) shall substitute for Condition 7.2.4(d), and for NO<sub>x</sub>, Condition 7.2.5(b)(ii)(C), shall substitute for Condition 7.2.4(f).

- A. The emissions of PM from the affected boiler in any one hour period shall not exceed the amount, in lb/hr, allowed by the formula in 35 IAC 212.207. For this purpose, the applicable PM standard for heat input from liquid fuel shall be 0.1 lb/mmBtu, pursuant to 35 IAC 212.206 and 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 lb/hr, allowed by the formula in 35 IAC 214.162. For this purpose, the applicable SO<sub>2</sub> standards for heat input from residual fuel oil and distillate fuel oil shall be 0.8, and 0.3 lb/mmBtu, respectively, pursuant to 35 IAC 214.121(b)(1), 214.121(b)(2), and 214.162.
  - C. The emissions of NO<sub>x</sub> from the affected boiler shall not exceed the amount, in lb/hr, allowed by the formula in 35 IAC 217.121(e).
- 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 and/or fuel oil 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 and/or fuel oil 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.

- 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, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for SO<sub>2</sub> and NO<sub>x</sub> Acid Rain Requirements, because the affected boiler is subject to 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, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for SO<sub>2</sub> and NO<sub>x</sub> State and NSPS Rule Requirements because the affected boiler is subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method, pursuant to 40 CFR 64.2(b)(1)(vi).
- f. The affected boiler is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources for CO State Rule Requirements because the affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard.

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

- a. As part of its operation and maintenance of the affected boiler, the Permittee shall perform a "combustion evaluation" on the boiler on at least a semi-annual basis, pursuant to Section 39.5(7)(d) of the Act. This evaluation shall, at a minimum, consist of process measurements of the concentration of CO in the flue gas of the affected boiler as well as any adjustments and/or preventative-corrective measures undertaken to maintain efficient combustion.
- b. At all times, 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).

7.2.7 Testing Requirements

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:

a. i. PM emission measurements shall be made no later than one year after the effective date of this condition. (Measurements made after December 31, 2003 may satisfy this requirement.)

ii. 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 5 MW or 2 percent (whichever is greatest) 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).

iii. 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.
- iv. 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).
- v.
- A. If standard fuel (i.e., coal, fuel oil, and gas) is less than 97.0 percent by weight of the fuel supply to a boiler during a quarter, the Permittee shall have measurements of PM and CO emissions from the boiler made during the next quarter while firing alternative fuel or process waste in the boiler.
  - B. The Permittee shall conduct such measurements while firing the boiler with at least 1.25 times the greatest

percentage of alternative fuel material or process waste in the calendar quarter that triggered the testing. This percentage at which testing shall be conducted shall not exceed that allowed by the maximum design capacity of the alternative fuel handling system. If the boiler has been firing a mix of alternative fuel materials or process wastes, 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 and process wastes burned in a boiler during a quarter is more than the percentage of such material in the fuel supply to the boiler when previous emission measurements were conducted.

vi. 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. These measurements shall be performed at the 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 test methods and procedures shall be used for these measurements. Refer to 40 CFR 60, Appendix A for USEPA Methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter (PM)	USEPA Methods 5
Carbon Monoxide (CO)	USEPA 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).
- 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(d) 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 boilers 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 6.2.3) 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 Attachment 6, pursuant to 40 CFR Part 64 as submitted in the Permittee's CAM plan application. At all times, the owner or operator 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 owner or operator 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 7.1.9(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.
- iii. Records for each day when an alternative fuel (i.e., a fuel material other than coal, gas or oil) 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, 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 (lb/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) and (d), including:
  - A. SO<sub>2</sub> emissions in the terms of the applicable standard (lb/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 lb/mmBtu as allowed by Condition 7.2.4(a)(ii) and 7.2.4(d), with the calculated SO<sub>2</sub> emission rate.
- iii. Records of the SO<sub>2</sub> emissions of the affected boiler in lb/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 (lb/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), and (f) including:
  - A. NO<sub>x</sub> emissions in the terms of the applicable standard (lb/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) and 7.2.4(f), 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) and 7.2.4(f).

- 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 7.2.3(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.
      - 1. Date, time and duration of the startup.
      - 2. 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.
      - 1. Identification of the applicable standard(s) that were or may have been exceeded.
      - 2. An explanation of the nature of such exceedance(s), including the magnitude of such excess emissions.
      - 3. A description of the actions taken or to be taken to minimize the magnitude and duration of excess emissions.
      - 4. 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.

1. A description of the events that led up to the extended startup duration.
2. The reason(s) for the extended startup duration.
3. An explanation of the consequences of the prolonged startup as it relates to the magnitude of emissions, including,
  - I. The actions taken to minimize emissions and the duration of the startup, and
  - II. 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:
    - 1. A detailed explanation why continued operation of the affected boiler was necessary.
    - 2. 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.
    - 3. An explanation of whether emissions of PM and CO during the incident exceeded or may have exceeded any applicable hourly standard.
    - 4. Emissions of NO<sub>x</sub> of SO<sub>2</sub> during the incident, on an hourly basis, if monitored emissions exceeded the 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 6.3.3]

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), (f) and (g) 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 7.1.10-2(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).
  - 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 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 7.2.9(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)(B) 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 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 7.2.10-2(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) and 7.2.4(d)\*. 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.
- \* For SO<sub>2</sub> emissions, the averaging period is a three-hour rolling average, as used to determine compliance with the

limitations of Condition 7.2.4(d). 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 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) and (f)\*. 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.

\* For NO<sub>x</sub> emissions, the averaging period is a three-hour rolling average, as used to determine compliance with the limitations of Condition 7.2.4(a)(ii) and (f). The records for excess emissions shall consist of three-hour rolling emission averages during which the limitation was exceeded.

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. Summary 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). When no excess opacity occurred or the continuous opacity monitoring system was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.
- ii. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative, if requested by the Illinois EPA or the opacity monitoring system downtime was more than 5 percent of the total operating time for the affected boiler during the quarter.
- 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:
  - 1. The percent opacity for each six-minute period.
  - 2. The start and stop time of each six minute period in excess of the limitation.
- D. A detailed explanation of the cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of the boiler.
- E. A detailed explanation of corrective actions and actions taken to lessen the opacity.
- F. Identification of the 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. A summary of the records required by Condition 7.2.9(g)(ii) 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 1: 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.

Note 2: Because the Permittee is subject to the reporting 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 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:

1. The starting date and time of the exceedance.
2. The duration of the exceedance.
3. The magnitude of the exceedance.
4. The percent opacity measured for each six-minute period during the exceedance.
5. The means by which the exceedance was indicated or identified, in addition to the level of opacity.
6. The cause of the exceedance, including whether the exceedance occurred during startup, malfunction or breakdown.
7. 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 or 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 7.2.10-2(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(g), 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(g)(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(g)(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:

1. 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.

2. 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).

3. 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.
4. 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:

1. 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).
2. 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).
3. 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 6.2.3] Pursuant to Section 39.5(17)(m) of the Act, the designated representative of the source must concurrently submit to the Illinois EPA in the same electronic format specified by the USEPA, the data and information submitted to USEPA on a quarterly basis pursuant to 40 CFR 75.64.

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 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 7.2.10-2(a) accompanied by the records required in Condition 7.2.9(h)(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 (1) 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. Other process wastes generated at the source in addition to used oil and boiler cleaning residue.
  - ii. Alternative fuels that do not constitute waste and were not generated from municipal waste or hazardous waste, such as petroleum coke, tire derived fuel (as defined at Section 54.10b of the Act), clean lumber and wood waste (as defined at 40 CFR 60.2265), shredded polyethylene agricultural containers, and seed corn, provided that such materials are shipped to the source in homogeneous form prepared for use as fuel (e.g., a shipment of tire derived fuel).

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 an 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 10 seconds apart or a record of 1-minute average opacity data determined from six 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:
    - 1. 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.
    - 2. 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 an affected boiler did not violate Condition 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) and 7.2.4(d) is addressed by continuous emission 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), (f) and (g) is addressed by continuous emissions monitoring in accordance with Condition 7.2.7(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 Coal Handling Equipment

#### 7.3.1 Description

The Permittee transfers and stores coal 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 7.4). Particulate matter (PM) emissions associated with these operations are controlled by various measures including the moisture content of the coal, enclosures, and covers.

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

##### Coal Receiving Operations

NSPS Equipment

Non-NSPS Equipment  
Truck Unloading

Coal Transfer Conveyors  
Enclosures and Covers

Outdoor Storage Piles

Coal Storage Bunkers

#### 7.3.3 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 7.3.1 and 7.3.2.

#### 7.3.4 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 standard, i.e., 30 percent opacity, in Condition 5.2.2(b), which generally addresses the opacity of the emission of smoke or other particulate matter, pursuant to 35 IAC 212.123.

- 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(c), 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(c).

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 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.

#### 7.3.5 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.

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

- a. i. The Permittee shall implement and maintain control measures for the affected operations, such as enclosure, natural surface moisture, application of dust suppressant, water sprays, and use of dust collection devices, to minimize visible

emissions of particulate matter and provide assurance of compliance with the applicable emission control requirements in Conditions 7.3.4, pursuant to Section 39.5(7)(a) of the Act.

ii. The Permittee shall operate and maintain each affected operation with the control measures identified in the record required by Condition 7.3.9(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)].

#### 7.3.7 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 USEPA Test 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.

#### 7.3.8 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 7.3.4(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 7.3.8(a), the Permittee shall perform observations of the

affected processes for visible emissions in accordance with USEPA Test Method 22 to confirm compliance with the requirements of Condition 7.3.4(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 Method 9 shall be conducted within one week as required in Condition 7.3.7(a). [Sections 39.5(7)(a) and (d) of the Act.]

#### 7.3.9 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, (ton/hour).
- b. i. The Permittee shall maintain a record, which shall be kept up to date, that contains the following for each affected operation and control measure pursuant to Condition 7.3.6(a).
  - A. The type of emission unit (conveyor, storage pile, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
  - B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;
  - C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous;
  - D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in

which they would be used and whether they would take the place of or supplement the primary control measures; and

- E. Such other information as may be necessary to demonstrate that the control measures assure compliance with the applicable emission standards and requirements in Conditions 7.3.4 and 7.3.6.
  - ii. A copy 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 7.3.8:
  - i. For the inspections required by Condition 7.3.8(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 identified in the record required by Condition 7.3.9(b)(i) for each affected operation, including the presence of any visible emissions.
    - C. A description of any maintenance or repair associated with the control measures identified in the record required by Condition 7.3.9(b)(i) 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 control measures specified by the record in Condition 7.3.9(b)(i) :
  - i. The date of the incident and identification of the affected operations that were involved.
  - ii. A description of the incident, including the control measures that were not present or operated as required by Condition 7.3.6(a)(ii); the established control measures that were present, if any; and other control measures or mitigation measures that were operated.
  - 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 the control measures identified in the record required by Condition 7.3.9(b)(i) were in place or the operations were shutdown (to resume operation only after these 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 the control measures identified in the record required by Condition 7.3.9(b)(i) 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 7.3.4, may have been violated during the incident, with supporting explanation.
- f. The Permittee shall maintain records for all opacity measurements made in accordance with USEPA Method 9 for the affected operations that it conducts or that

are conducted on 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 Condition 7.3.7(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.

#### 7.3.10 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 7.3.10(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 7.3.6(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 7.3.9(e).
  
- iii.
  - A. Notification with the quarterly reports required by Condition 7.1.10-2(a) and 7.2.10-2(a) for other deviations not addressed by Conditions 7.3.10(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.

#### 7.3.11 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.

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.4 is addressed by the control, testing, inspection, and recordkeeping required by Conditions 7.3.6(a), 7.3.7(a), 7.3.8, and 7.3.9, respectively.
- b. Compliance with Condition 7.3.6(a) is addressed by the testing, inspection, and recordkeeping required by Conditions 7.3.7, 7.3.8, and 7.3.9, respectively.

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

7.4 Coal Processing Equipment

7.4.1 Description

The Permittee prepares or processes coal for use as fuel in its boilers 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.

7.4.2 List of Emission Units and Air Pollution Control Equipment

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

7.4.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions, is an individual process emission unit as described in Conditions 7.4.1 and 7.4.2.

7.4.4 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 standard, i.e., 30 percent opacity, in Condition 5.2.2(b), which generally addresses the opacity of the emission of smoke or other particulate matter, pursuant to 35 IAC 212.123.
- 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) of 35 IAC 212.321. [35 IAC 212.321(a)], (See also Attachment 1.)

- 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. 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(c) except during periods of startups, shutdowns, and malfunction, pursuant to 40 CFR 60.11(c)

#### 7.4.5 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.

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

- a. i. The Permittee shall implement and maintain control measures for the affected processes 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 in Conditions 7.4.4 pursuant to Section 39.5(7)(a) of the Act.
- 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)]

7.4.7 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 USEPA Test 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.

#### 7.4.8 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 7.4.6(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 7.4.8(a), the Permittee shall perform observations of the affected processes for visible emissions in accordance with USEPA Test 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 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 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, (ton/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 control measures identified in the record required by Condition 7.4.9(b)(i):
- 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 control measures identified in the record required by Condition 7.4.9(b)(i), the following additional information should be provided:
    - 1. The length of time after the incident was identified that the affected process(es) continued to operate before control measures identified in the record required by Condition 7.4.9(b)(i) 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;

2. The control measures identified in the record required by Condition 7.4.9(b)(i) that were not present or implemented;
  3. The control measures identified in the record required by Condition 7.4.9(b)(i) that were present, if any; and
  4. 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, that contains the following for the affected process and the control measures pursuant to Condition 7.4.6(a).
- A. The type of emission unit (crushers, etc.) and the Permittee's designation for each emission unit with a description of the emission points on the emission unit;
  - B. Whether the emission unit is considered to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation;
  - C. Description of the primary control measures that are utilized, with a description of the control measure and estimated frequency of application, if not continuous;

- D. Description of any secondary control measures that would be used based on circumstances (freezing temperatures, recent rain, dry weather, etc.) with identification of the circumstances in which they would be used and whether they would take the place of or supplement the primary control measures; and
  - E. Such other information as may be necessary to demonstrate that the control measures assure compliance with the applicable emission standards and requirements in Conditions 7.4.4 and 7.4.6.
- 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 7.4.4(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 7.4.7(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. A copy 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 7.4.8:
    - i. For inspections required by Condition 7.4.8(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 control measures identified in the record required by Condition 7.4.9(b)(i) for the inspected process(es).
  - C. A description of any maintenance or repair associated with control measures identified in the record required by Condition 7.4.9(b)(i) 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 control measures identified in the record required by Condition 7.4.9(b)(i).
- d. The Permittee shall keep records for all opacity measurements made in accordance with USEPA 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 7.4.7(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.

#### 7.4.10 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 7.4.10(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 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 7.4.6(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 Condition 7.1.10-2(a)(iv) 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 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.

7.4.11 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.

7.4.12 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 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 Fly Ash Equipment

7.5.1 Description

The Permittee operates equipment to handle and store fly ash from the two Lakeside boiler in dry form if there is a market for such material. This dry ash is recovered by the ESP on the boilers.

The particulate matter (PM) emissions from the handling of dry fly ash are controlled by enclosure and a filter-type dust collection devices.

7.5.2 List of Emission Units and Air Pollution Control Equipment

Unit I.D.	Emission Unit Description	Emission Control Equipment
LS-DAHS	Pneumatic Transfer System	Baghouse BH-LS
Lakeside LS-DASS	Storage Silo and Loadout	Bin Vent Filter

7.5.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions, is an individual process emission unit 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, pursuant to 35 IAC 212.301.
- b. The affected processes shall comply with the standard, in Condition 5.2.2(b), i.e., 30 percent opacity, which generally addresses the opacity of the emission of smoke or other particulate matter, pursuant to 35 IAC 212.123.
- 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) [35 IAC 212.321(a)]. (See also Attachment 1.)

7.5.5 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected processes not being subject to the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR Part 60, Subpart 000, because the affected processes do not meet the definition of a nonmetallic mineral processing plant because there is no equipment used to crush or grind ash.
- b. 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 have potential pre-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

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

- a. i. The Permittee shall implement and maintain control measures for the affected processes, including enclosure and filter-type dust collection devices, that minimize visible emissions of particulate matter and provide assurance of compliance with the applicable emission standards in Condition 7.5.4, pursuant to Section 39.5(7)(a) of the Act.

7.5.7 Opacity and Emissions 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 USEPA Test 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 processes 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 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 condition, including recent weather.
  - E. Description of the operating conditions of the affected processes.
  - F. Raw data.
  - G. Opacity determinations.
  - H. Conclusions.
- 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 the affected processes, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7)(d) of the Act.

- ii.
  - A. Testing shall be conducted using appropriate USEPA Reference Test Methods, including Method 5 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 specified by Condition 8.6.2.
- 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 complete Final Report(s) for required emission testing to the Illinois EPA, no later than 90 days after the date of testing. These reports 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.

#### 7.5.8 Inspection Requirements

- a. The Permittee shall perform inspections of the affected processes on at least a weekly basis, including associated control measures, while the affected processes are in use, to confirm compliance with the requirements of Condition 7.5.6(a). These inspections may be scheduled so that only a number of affected processes are reviewed during each inspection, provided however, that all affected processes shall be certified by supervisory or management personnel. [Sections 39.5(7)(a) and (d) of the Act]
- b. The Permittee shall perform detailed inspections of the dust collection equipment for affected processes at least every nine months while the processes are out of service, with an initial inspection performed before any maintenance and repair activities are conducted during the period the process is out of service and a follow-up inspection performed after any such activities are completed. [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 processes, pursuant to Sections 39.5(7)(a) and (e) 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. Information related to the dust collection equipment associated with the affected processes, including the performance specifications for filter material and maximum design particulate matter emissions, gr/dscf.
    - B. The maximum operating capacity of each affected process, (ton/hour).

- ii. Operating log(s) for the affected processes, which shall include information for any incident in which the operation of the process 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. Maintenance and repair log(s) for the affected processes, including each dust collection device 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 control measures currently being implemented for the affected processes pursuant to Condition 7.5.6(a). These control measures are referred to as the "established control measures" in this subsection of this permit.
- 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(d) at the maximum process weight rate at which each affected process can be operated (tons ash/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 7.5.9(a)(i) or testing of an affected process is conducted in accordance with Condition 7.5.7(b), 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 in accordance with Condition 5.6.2(d).

- c. The Permittee shall maintain records of the following for the inspections required by Condition 7.5.8:
  - i. For the inspections required by Condition 7.5.8(a) for each affected process:
    - 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 process, including the presence of any visible emissions or accumulations of fly ash in the vicinity of the process.
    - 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.
  - ii. For the inspections required by Condition 7.5.8(b) for the dust collection equipment for affected processes:
    - A. Date and time the inspection was performed and name(s) of inspection personnel.
    - B. The observed condition of the equipment.
    - C. A summary of the maintenance and repair that is to be or was conducted on the equipment.
    - D. A description of any maintenance or repair 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. A summary of the observed condition of the equipment as related to its ability to reliably and effectively control emissions.

- d. The Permittee shall maintain records of the following for each incident when any affected process operated without the established control measures:
- i. The date of the incident and identification of the affected process(es) 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; other control measures or mitigation measures that were implemented, if any; and the magnitude of the PM emissions during the incident.
  - 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 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.
  - v. The estimated total duration of the incident, i.e., the total length of time that the affected process(es) ran without established control measures and the estimated amount of material processed 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 standard, as listed in Condition 7.5.4, may

have been violated during the incident, with an estimate of the amount of any excess PM emissions (lbs) and supporting explanation.

- e. The Permittee shall keep records for all opacity measurements made in accordance with USEPA 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 following notifications and reports concerning incidents when operation continued with excess emissions, including continued operation of the affected process during malfunction or breakdown.
  - A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice or facsimile) for each incident in which the opacity from the affected process exceeds or may have exceeded the applicable standard for two or more than eight consecutive 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 period, the Permittee need only report the incident 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 description of the incident and its cause(s), 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 the affected process that was not in compliance with applicable requirements in Conditions 7.5.6(a) that continued for more than two 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(d).
  - iii. A. Notification with the quarterly reports required by Condition 7.1.10-1(a)(iv) 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 deviation quarterly report, the Permittee shall also address deviations that occurred during the reporting period 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. Operation of additional dust collection equipment.
- b. 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, 7.5.8, and 7.5.9, respectively.
- b. Compliance with Condition 7.5.6(a) is addressed by the 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 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 the Dallman boilers. The equipment to handle these materials was installed when the first SO<sub>2</sub> scrubber was installed, on Dallman Unit 3. The limestone is a raw material for the scrubbers, which control SO<sub>2</sub> emissions by reacting to 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.

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 USEPA Test 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 USEPA Test 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 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 (ton/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:
    - 1. 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;
    - 2. The established control measures that were not present or implemented; and
    - 3. 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(b), 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 USEPA 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(e).
  - iii. A. Notification with the quarterly reports required for the coal fired Boiler 33 by Condition 7.1.10-2(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 (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. 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 Engines

7.7.1 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. They also have the ability to produce electricity that can be placed onto the external power distribution grid for sale. The engines are fired with distillate fuel oil.

7.7.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Equipment
Engine ENG1	Distillate Oil Fired Engine	None
Engine ENG2	Distillate Oil Fired Engine	None
Engine ENG3	Distillate Oil Fired Engine	None

7.7.3 Applicability Provisions

- a. The "affected engine" for the purpose of these unit-specific conditions, are the engines described in Conditions 7.7.1 and 7.7.2.

7.7.4 Applicable Emission Standards

- a. The affected engines shall comply with the standard in Condition 5.2.2(b), i.e., 30 percent opacity, pursuant to 35 IAC 212.123.
- b. The affected engines shall comply with 35 IAC 214.301, which provides that no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.

7.7.5 Non-Applicability of Regulations of Concern

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

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

- a. Distillate fuel oil shall be the only fuel fired in the affected engines.
- b. Fuel with a sulfur content greater than 0.05 weight percent shall not be fired in the affected engines, pursuant to the Permittee's representation that the units are exempt from the Acid Rain Program by meeting the new units exemption requirement of 40 CFR 72.7(a). The affected engines are 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.
- c.
  - i. The annual consumption of fuel by the engines shall not exceed 213,000 gallons. [T1].
  - ii. The emissions of the affected engines shall not exceed the following limitations: [T1]

<u>Contaminant</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 limitations 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 limitations were established in Construction Permit 01070019. These limitations were intended to ensure that these engines do not constitute a major modification pursuant to the PSD rules.

- d. i. If an affected engine is routinely operated or exercised to confirm that the engine will operate when needed, the operation and opacity of the engine shall be formally observed by operating personnel for the engine or a member of Permittee's environmental staff on a regular basis to assure that the engines is operating properly, which observations shall be made at least every six months.
- ii. If an affected engine is not routinely operated or exercised, i.e., the time interval between operation of an affected engine is typically greater than six months, the operation and opacity of the affected engine shall be formally observed as provided above each time the Permittee carries out a scheduled exercise of the affected engine.
- iii. The Permittee shall also conduct formal observations of operation and opacity of an affected engine upon written request by the Illinois EPA. With the agreement of the Illinois EPA, the Permittee may schedule these observations to take place during periods when it would otherwise be operating the affected engine.

#### 7.7.7-1 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 USEPA Test 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 7.7.7(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.

#### 7.7.7-2 Fuel Oil Sampling and Analysis

- a. i. The Permittee shall have the sulfur content of the oil supply to the affected engines, in lb/mmBtu, determined from an analysis of representative sample of the oil supply, as

follows, pursuant to Section 39.5(7)(d) of the Act:

- A. From a sample taken no later than 90 days after first operating the affected engines pursuant to this permit, provided, however, that if such sample is taken following operation of the affected engines, the sample shall be taken prior to adding more oil to the storage tank.
- B. From a sample taken no later than 30 days after acceptance of a shipment of fuel whose sulfur content would not meet Condition 7.7.4(b) based upon supplier data, provided however, that if the affected engines are operated following acceptance of such a shipment, the sample shall be taken prior to adding a subsequent shipment of oil to the relevant storage tank.
- C. From a sample taken 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.

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 New Source Performance Standards 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.
  - i. The Permittee shall have the NO<sub>x</sub> emissions at the affected engines during representative operating conditions measured within 90 days of a written request from the Illinois EPA, as specified by such request, pursuant to Section 39.5(7)(b) of the Act.
  - ii. Testing shall be conducted using applicable USEPA Reference Test 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 90 days after the date of testing.

7.7.8 Monitoring Requirements

None

7.7.9 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. i. Operating records for each affected engine, which shall include the following information:
  - A. Information for each time the engine is operated, with date, time, duration, and purpose (i.e., exercise or power service).
  - B. Information for the observations conducted pursuant to Condition 7.7.6(b), with date, time, personnel, and findings.
  - C. 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.
  - D. Information identifying any deviation from Condition 7.7.6(a).
- ii. An inspection, maintenance and repair record for each affected engine, listing activities performed with date and description.
- 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 standard in Condition 7.7.4(b).

- c. Total distillate fuel usage for the affected engines, gallons/month and gallons/year.
- d. i. For pollutants other than SO<sub>2</sub>, the Permittee shall maintain a demonstration that confirms that the hourly emissions of each affected engine comply with the hourly emission limitations in Condition 7.7.6(c) 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. The Permittee shall keep records for all opacity measurements made in accordance with USEPA 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 7.7.6(c), 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.

#### 7.7.10 Reporting Requirements

##### 7.7.10-1 Reporting of Deviations

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:

- a. 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 an affected engine exceeds or may have exceeded the limit in Condition 7.7.4(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 7.7.10-1(b)(ii)(A).)
- ii. 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.
- b. i. Reporting with the quarterly reports required for the coal-fired boilers by Condition 7.1.10-2(a) for other deviations not addressed by Condition 7.7.10-1(a)(i), 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.

- ii. 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 7.7.10-1(a), 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.

7.7.10-2 Reporting of Sulfur Content of Fuel Supply

Pursuant to Section 39.5(7)(a) of the Act, the Permittee shall report the annual average sulfur content (percent by weight) of the oil burned in each affected engine, with supporting calculations, with the last quarterly report for each calendar year required by Condition 7.1.10-2(a).

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.7.12 Compliance Procedures

- a. Compliance with opacity limit of Condition 7.7.4(a) is addressed by the inspection, testing, and recordkeeping requirements in Conditions 7.7.6(d), 7.7.7, and 7.7.9.
- b. Compliance with the SO<sub>2</sub> limit of Condition 7.7.4(b) is addressed by records required by Condition 7.7.9(c). For this purpose, complete conversion of sulfur to SO<sub>2</sub> shall be assumed, e.g., SO<sub>2</sub> emissions in lb/mmBtu are twice the sulfur content of the fuel supply, in lb/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 USEPA's Reference Method 19, which is well below the 2000 ppm limit in Condition 7.7.4(b).

- c. Compliance with the requirements of Condition 7.7.6 is addressed by the recordkeeping required by Condition 7.7.9.

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

7.8 Storage Tank

7.8.1 Description

The Permittee stores gasoline for use in plant vehicles.

7.8.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Tank T1	Gasoline Storage Tank 1,000 Gallon Capacity	Submerged Loading Pipe

7.8.3 Applicability Provisions

The "affected storage tank" for the purpose of these unit-specific conditions, is the storage tank described in Conditions 7.8.1 and 7.8.2.

7.8.4 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)]

7.8.5 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 at the time of issuance of this permit. The source must address CAM applicability for the affected gasoline storage tank upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

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

- a. Pursuant to Condition 7.8.4(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.)

7.8.7 Testing Requirements

None

7.8.8 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 7.8.6(a), pursuant to Sections 39.5(7)(a) and (d) of the Act.

7.8.9 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 7.8.8, 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, gal/mo and gal/yr, by type of material.

#### 7.8.10 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 7.8.4 or 7.8.6, i.e., that was conducted without a submerged loading pipe.
- b. Notification with the quarterly reports required by Condition 7.1.10-2(a) for other deviations, including deviations from applicable recordkeeping requirements.

#### 7.8.11 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 (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 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.

7.8.12 Compliance Procedures

- a. Compliance with Conditions 7.8.4(a) is addressed by the use of a submerged loading pipe as required in Condition 7.8.6(a) and by the inspections and recordkeeping required by Conditions 7.8.8 and 7.8.9.
- b. Compliance with Condition 4.8.6 is addressed by the inspections and the recordkeeping required by Conditions 7.8.8 and 7.8.9.

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

## 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 6.2. 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  
5415 North University  
Peoria, Illinois 61614

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: (1) the Illinois EPA, Air Compliance Section, (2) the Illinois EPA, Air Regional Field Office, and (3) USEPA Region 5 - Air Branch. (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.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. 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)(l) 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	lb/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	lb/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	lb/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	lb/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	lb/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	lb/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 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: \_\_\_\_\_

#### 10.4 Attachment 4 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)

10.5 Attachment 5 - Acid Rain Program Permit

217-782-2113

**ACID RAIN PROGRAM  
PERMIT**

City, Water, Light and Power  
Office of Public Utilities  
Attn: Mr. William A. Murray, Designated Representative  
4th Floor, Municipal Center East  
Springfield, Illinois 62757

Oris Nos.: 963 (Dallman)  
964 (Lakeside)  
IEPA I.D. No.: 167120AAO  
Source/Unit: Dallman/Units 31, 32 and 33  
Lakeside/Units 7 and 8  
Date Received: February 27, 2004  
Date Issued: March 21, 2005  
Effective Date: January 1, 2005  
Expiration Date: December 31, 2009

**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 and Lakeside 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*	2005	2006	2007	2008	2009
		1,385	1,385	1,385	1,385	1,385
	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 Lb/Hour at 100% Load)				

DALLMAN UNIT 32	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73*	2005	2006	2007	2008	2009
		1,568	1,568	1,568	1,568	1,568
	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 Lb/Hour at 100% Load)				

DALLMAN UNIT 33	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73*	2005	2006	2007	2008	2009
		5,199**	5,199	5,199	5,199	5,199
	NO <sub>x</sub> Limit	See Provisions for NO <sub>x</sub> Early Election, Below			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]

\*\* Also includes return of repowering deduction of 2 allowances, which were returned by USEPA on October 30, 2000.

LAKESIDE UNIT 7	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73*	2005	2006	2007	2008	2009
		2,554**	2,554**	2,554**	2,554**	2,554**
	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 Lb/Hour at 100% Load)				

LAKESIDE UNIT 8	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73*	2005	2006	2007	2008	2009
		1,446	1,446	1,446	1,446	1,446
	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 Lb/Hour at 100% Load)				

\* 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]

\*\* Also includes return of repowering deduction of 1 allowance, which was returned by USEPA on October 30, 2000.

**NO<sub>x</sub> EARLY ELECTION COMPLIANCE PLAN**

Pursuant to 40 CFR 76.8(d)(2), in December 1998, the Illinois EPA approved a NO<sub>x</sub> emissions early election compliance plan for Dallman Unit 33, effective for calendar years 2000 through 2007 (attached). Under this plan, the annual average NO<sub>x</sub> emission rate for Dallman Unit 33, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.45 lb/million Btu for Phase I tangentially fired boilers. If the affected unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(1), of 0.40 lb/million Btu for

Phase II tangentially fired boilers until calendar year 2008.

**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 Unit 33 to comply with applicable emission limitations for NO<sub>x</sub> under the Acid Rain program. Pursuant to 40 CFR 76.8(d)(2), in December 1998, the Illinois EPA approved NO<sub>x</sub> early election compliance plan for Dallman Unit 33. The compliance plan is effective for calendar years 2000 through 2007. Under the compliance plan, the annual average NO<sub>x</sub> emission rate for Dallman Unit 33, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.45 lb/million Btu for Phase I tangentially fired boilers. Dallman Unit 33 shall be subject to the applicable NO<sub>x</sub> emission limitation, under 40 CFR 76.7(a)(1), of 0.40 lb/million Btu for Phase II tangentially fired boilers for calendar years 2008 and 2009.

In addition to the described NO<sub>x</sub> compliance plan for Dallman Unit 33, 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,

including state requirements under 35 Ill. Adm. Code Part 217 Subpart W, which addresses NO<sub>x</sub> emissions from Dallman Units 31, 32, and 33, and Lakeside Units 7 and 8.

If you have any questions regarding this permit, please contact Kunj Patel at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permits Section  
Division of Air Pollution Control

cc: Cecilia Mijares, USEPA Region V  
IEPA Region 3  
2, Illinois EPA



Plant Name (from Step 1) Dullman

**STEP 3**

Read the  
standard  
requirements

**Permit 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 unit 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 unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; 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).
- (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.

STEP 3,  
Cont'd.

**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 unit 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 unit 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;
  - (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.

Plant Name (from Step 1)

Ballman

Step 3,  
Cont'd.**Liability, Cont'd.**

(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. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(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 to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit 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.

STEP 4

**Certification**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 William A. Murray

Signature

William A. Murray

Date 02/26/04

EPA Form 7810-10 (Rev. 12-03)



# Phase II NO<sub>x</sub> Compliance Plan

For more information, see instructions and refer to 40 CFR 76.3

This submission is:  New  Revised Renewal

**STEP 1**  
Indicate plant name, State, and ORIS code from NADB, if applicable

Plant Name	Ballman	IL State	963 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.

Unit	ID#	ID#	ID#	ID#	ID#
33					
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"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)

<input checked="" type="checkbox"/>	<input type="checkbox"/>				
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(c) EPA approved early emission plan under 40 CFR 76.3 through 76.7 (also indicate above emission limit specified in plan)

<input checked="" type="checkbox"/>	<input type="checkbox"/>				
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(d) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase I dry bottom wall-fired boilers)

<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 type="checkbox"/>				
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(f) Standard annual average emission limitation of 0.45 lb/mmBtu (for cell burner boilers)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(g) Standard annual average emission limitation of 0.25 lb/mmBtu (for cyclone boilers)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(j) NO<sub>x</sub> Averaging Plan (include NO<sub>x</sub> Averaging form)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(k) Common stack pursuant to 40 CFR 75.17(a)(1)(ii)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

(l) Common stack pursuant to 40 CFR 75.17(a)(2)(ii)(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"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Plant Name (from Step 1) **Callinan**

STEP 2, cont'd.

Unit	Unit	Unit	Unit	Unit	Unit
Type	Type	Type	Type	Type	Type

(m) EPA-approved common stack approval method pursuant to 40 CFR 76.17 (a)(2)(iii), (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 76.5(a)(1)(i)). These requirements are listed in the 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 76.5(a)(2) except as provided under 40 CFR 76.5(a)(3)(ii).

**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 76.5 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR 76.7.

**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 fines or imprisonment.

Name	William A. Murray	
Signature	<i>William A. Murray</i>	Date 02/26/04



Plant Name (from Step 1) Lakeside

**STEP 3****Read the standard requirements****Permit 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 unit 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 unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; 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).
- (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.

STEP 3,  
Cont'd.

**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 unit 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 unit 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;
  - (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.

Attachment 6: Compliance Assurance Monitoring Plan

Table 3.1	Emission Units:	Dallman Units 31, 32, & 33
	Significant Emission Unit Section:	7.1 & 7.2
	Pollutant:	PM

Indicators: #1: Opacity

GENERAL CRITERIA

THE MONITORING APPROACH USED TO MEASURE THE INDICATORS:	Continuous Opacity Monitor (COMs)
THE INDICATOR RANGE WHICH PROVIDES A REASONABLE ASSURANCE OF COMPLIANCE:	20%
QUALITY IMPROVEMENT PLAN (QIP) THRESHOLD LEVEL:	5% of the Unit Operating Time in a calendar quarter

PERFORMANCE CRITERIA

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> :	Three hour block averages

<sup>a</sup> 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 this part, 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.