

FINAL DRAFT CAAPP PERMIT  
Dynegy  
I.D. No.: 119020AAE  
Application No.: 95090096  
June 9, 2003

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT  
and  
TITLE I PERMIT<sup>1</sup>

PERMITTEE

Dynegy Midwest Generation, Inc.  
Attn: Natalie Locke  
2828 N. Monroe Street  
Decatur, IL 62526

Application No.: 95090096 I.D. No.: 119020AAE  
Applicant's Designation: Wood River Date Received: September 07, 1995  
Operation of: Electrical Power Generation  
Date Issued: TO BE DETERMINED Expiration Date<sup>2</sup>: DATE  
Source Location: #1 Chessen Lane, Alton, IL 62002, Madison County  
Responsible Official: M. Sam Krueger, Plant Manager, Wood River Power Station

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 Phase II Acid Rain Permit issued to Dynegy Midwest Generation, Inc. by the Illinois EPA is incorporated into this CAAPP permit (See Attachment 5).

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

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

DES:KMP:RWC

cc: Illinois EPA, FOS, Region 3  
USEPA

<sup>1</sup>This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.

<sup>2</sup>Except as provided in Condition 8.7 of this permit.

TABLE OF CONTENTS

	<u>PAGE</u>
1.0 SOURCE IDENTIFICATION	#
1.1 Source	
1.2 Owner/Parent Company	
1.3 Operator	
1.4 General Source Description	
2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	#
3.0 INSIGNIFICANT ACTIVITIES	#
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	#
5.0 OVERALL SOURCE CONDITIONS	#
5.1 Source Description	
5.2 Applicable Regulations	
5.3 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 General Compliance Procedures	
6.0 EMISSIONS CONTROL PROGRAMS	#
6.1 NO <sub>x</sub> Trading Program	
6.2 Acid Rain Program	
7.0 UNIT SPECIFIC CONDITIONS	#
7.1 Coal Fired Boilers	
7.2 Coal Handling Equipment	
7.3 Coal Processing Equipment	
7.4 Fly Ash Equipment	
7.5 Natural Gas and/or #2 Fuel Oil Fired Boilers	
7.6 Storage Tanks	
8.0 GENERAL PERMIT CONDITIONS	#
8.1 Permit Shield	
8.2 Applicability of Title IV Requirements	
8.3 Emissions Trading Programs	
8.4 Operational Flexibility/Anticipated Operating Scenarios	
8.5 Testing Procedures	
8.6 Reporting Requirements	

8.7	Obligation to Comply with Title I Requirements	
9.0	STANDARD PERMIT CONDITIONS	#
9.1	Effect of Permit	
9.2	General Obligations of Permittee	
9.3	Obligation to Allow Illinois EPA Surveillance	
9.4	Obligation to Comply with Other Requirements	
9.5	Liability	
9.6	Recordkeeping	
9.7	Annual Emissions Report	
9.8	Requirements for Compliance Certification	
9.9	Certification	
9.10	Defense to Enforcement Actions	
9.11	Permanent Shutdown	
9.12	Reopening And Reissuing Permit For Cause	
9.13	Severability Clause	
9.14	Permit Expiration and Renewal	
10.0	ATTACHMENTS	
10.1	Attachment 1 - Emissions of Particulate Matter from New Process Emission Units	1-1
10.2	Attachment 2 - Emissions of Particulate Matter from Existing Process Emission Units	2-1
10.3	Attachment 3 - Example Certification by a Responsible Official	3-1
10.4	Attachment 4 - Guidance	4-1
10.5	Attachment 5 - Acid Rain Program Permit	5-1

1.0 SOURCE IDENTIFICATION

1.1 Source

Dynegy Midwest Generation, Inc.  
#1 Chessen Lane  
Alton, IL 62002  
618/462-9251 ext. 296

I.D. No.: 119020AAE  
Acid Rain Permit ORIS Code No.: 898

Standard Industrial Classification: 4911, Electrical Services

1.2 Owner/Parent Company

Dynegy Midwest Generation, Inc.  
2828 N. Monroe Street  
Decatur, IL 62526

1.3 Operator

Dynegy Midwest Generation, Inc.  
2828 N. Monroe Street  
Decatur, IL 62526

Donald Crone/Environmental Contact  
618/433-0110

1.4 General Source Description

Wood River power station is located at #1 Chessen Lane in East Alton. The source operates two coal fired boilers and three natural gas and/or #2 fuel oil fired boilers and associated steam turbine generators to produce electricity..

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
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
ATU	Allotment Trading Unit
BAT	Best Available Technology
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
CFR	Code of Federal Regulations
EGU	electrical generating unit(s)
ERMS	Emissions Reduction Market System (35 IAC Part 205)
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
Mg	megagram or metric ton
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
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material



### 3.0 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:

Ethylene Glycol Tank  
Recycling and Storing Ethylene Glycol Tank

- 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:

None

- 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:

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 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)].

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

#### 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 219.182.
- 3.2.2 For each particulate matter process emission unit, 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 219.301, 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
Boiler 4	Combustion Engineering (Model #CE 30250), Field Constructed in 1952, Nominal Rating 90 MW	Electrostatic Precipitator (ESP) with SO <sub>3</sub> Injection System and Dust Collection Device, Low NO <sub>x</sub> Burners (LNB) with Separated Over Fire Air (SOFA) System
Boiler 5	Combustion Engineering (Model #CE 9261), Field Constructed in 1962, Nominal Rating 356 MW	Electrostatic Precipitator (ESP), Low NO <sub>x</sub> Burners (LNB) with Separated Over Fire Air (SOFA) System
Coal Handling Equipment	Coal Receiving Operations, Coal Crushing House, Coal Storage Operations	Enclosure, Covers, and Dust Suppressant Application System
Breaker Building Crushers	Coal Crushing Operation	Enclosures and Covers, Dust Suppressant Application, and Dust Collection Devices
Fly Ash Equipment	Hoppers, Silos, and Conveying and Loading Operations	Dust Collection Devices, Enclosures and Covers
Boiler B1	Combustion Engineering (Model #CE 8247), Field Constructed in 1948, Nominal Rating 50 MW	None
Boiler B2	Combustion Engineering (Model #CE 8247), Field Constructed in 1948, Nominal Rating 50 MW	None
Boiler B3	Combustion Engineering (Model #CE 8247), Field Constructed in 1948, Nominal Rating 50 MW	None
S1	500 Gallon Gasoline Storage Tank	Submerged Loading Pipe

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of SO<sub>x</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 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.

Compliance with this requirement shall be based on the procedures in Section 7 (Unit Specific Conditions) of this permit.

- 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.

5.2.3 Fugitive Particulate Matter Operating Program

- a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].
- b. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].

- c. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

#### 5.2.4 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, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- 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 certified by an approved technician certification program pursuant to 40 CFR 82.161.

#### 5.2.5 Risk Management Plan

Should this stationary source pursuant to 40 CFR 68.215(a)(2)(i) and (ii), 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.

- 5.2.6 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, then 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 with the applicable requirements of such regulation(s)

as part of the annual compliance certification, as required by Condition 9.8.

- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC Subtitle B that was promulgated after the date issued of this permit.

#### 5.2.7 Episode Action Plan

- a. If the source is required to have an episode action plan 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 a change occurs at the source that requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
  - i. Illinois EPA, Compliance Section.

#### 5.2.8 CAM Plan

This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit 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.

#### 5.3 Non-Applicability of Regulations of Concern

None

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. The Permittee shall be required to pay the maximum fee of \$250,000.00 per year, pursuant to Section 39.5(18) (a) (ii) (A) of the Act.

5.5.2 Emissions of Hazardous Air Pollutants (HAPs)

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, or Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 General Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.11 and prepare its Annual Emission Report, pursuant to Section 39.5(7) (b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 Retention and Availability of Records

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 during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

## 5.7 General Reporting Requirements

### 5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section 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.

None

### 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 including information for emissions of hydrogen chloride, hydrogen fluoride, and other hazardous air pollutants, as specified by 35 IAC Part 254..

## 5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

## 5.9 General Compliance Procedures

### 5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.

## 6.0 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, as required by the NO<sub>x</sub> SIP Call Rule under Section 126 of the CAA. 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. (In 2004, the first year that the NO<sub>x</sub> Trading Program is in effect, the control period will be May 31 through September 30.) 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> emissions 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 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 emission units are addressed as budget EGU.

Boilers B4, B5, B1, B2, and B3

- 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).
- 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).

Note: Pursuant to 40 CFR 96.70(b), existing budget EGU are to begin complying with applicable monitoring requirements of 40 CFR Part 96 at least one year in advance of the start of the first control period governed by the NO<sub>x</sub> Trading Program.

#### 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 6.1.12.) 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 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 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 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.

Note: If the start of the NO<sub>x</sub> Trading program is shifted because of a Court Decision, the years defining the different control periods would be considered to be adjusted accordingly, as provided by the Board note following 35 IAC 217.764.

- 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 Eligibility for NO<sub>x</sub> Allowances from the New Source Set-Aside (NSSA)

The Permittee is not eligible to obtain NO<sub>x</sub> allowances for the budget EGU identified in Condition 6.1.2(a) from the NSSA, as provided by 35 IAC 217.768, because the budget EGU are "existing" budget EGU.

6.1.10 Eligibility for Early Reduction Credits (ERC)

The Permittee is eligible to request NO<sub>x</sub> allowances for the budget EGU identified in Condition 6.1.2(a) for any early reductions in NO<sub>x</sub> emissions, as provided by 35 IAC 217.770.

6.1.11 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).

6.1.12 References

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

Company Name/ I.D. No.	Generating Unit	EGU	NOx Budget Allowances	80% of NOx Budget Allowances	50% of NOx Budget Allowances	2004, 2005, 2006 Allowances	2007, 2008 Allowances	2009, 2010 Allowances
1	2	3	4	5	6	7	8	9
119020AAE	Wood River 1	Wood River 1	0	0	0	0	0	0
119020AAE	Wood River 2	Wood River 2	0	0	0	0	0	0
119020AAE	Wood River 3	Wood River 3	0	0	0	0	0	0
119020AAE	Wood River 4	Wood River 4	219	175	110	208	172	107
119020AAE	Wood River 5	Wood River 5	714	571	357	678	560	350
Company Totals:			No NSSA	No NSSA	No NSSA	5% NSSA	2% NSSA	2% NSSA

## 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 B1, B2, B3, B4, and B5

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 B4 and B5 shall not exceed the limit set by 40 CFR Part 76, which currently is 0.40 lb NO<sub>x</sub> per million Btu heat input on an annual average basis with the ability for averaging among units as allowed by an Acid Rain Permit. SO<sub>2</sub> emissions of the affected units shall not exceed any allowances that the source lawfully holds under Title IV provisions. [Section 39.5(7)(g) and (17)(1) of the Act]

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

### 6.2.3 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)  
CO<sub>2</sub>: Continuous Monitoring for carbon dioxide (40  
CFR Part 75.13)

#### 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 two coal-fired boilers for electric generation. . The boilers, which were built in the 1952 and 1962, have nominal rating of 90 MW and 356 MW, respectively, and are served by separate stacks. These boilers also have the capability to fire at various modes such as combination of coal, and/or natural gas as their principle fuel. In addition to coal, these boilers fire natural gas during startup and for flame stabilization. Particulate matter (PM) emissions from the boiler B4 are controlled by electrostatic precipitator with flue Gas Conditioning, and dust collection device. Particulate matter (PM) emissions from the boiler B5 are controlled by electrostatic precipitator. Nitrogen oxide (NO<sub>x</sub>) emissions from the two boilers are controlled with combustion control, i.e. Low-NO<sub>x</sub> Burners and Separated Over Fire Air (SOFA) systems.

7.1.2 List of Emission Units and Air Pollution Control Equipment

These unit-specific conditions address the following emission units:

Boiler ID	Description	Emission Control Equipment
Boiler B4	Combustion Engineering (Model #CE 30250), Field Constructed in 1952, Nominal Rating 90 MW	ESP with SO <sub>3</sub> Injection System, Dust Collection Device, Low NO <sub>x</sub> Burners (LNB) with Separated Over Fire Air (SOFA) System
Boiler B5	Combustion Engineering (Model #CE 9261), Field Constructed in 1962, Nominal Rating 356 MW	ESP, Low NO <sub>x</sub> Burners (LNB) with Separated Over Fire Air (SOFA) System

7.1.3 Applicability Provisions

- a. An "affected boiler" for the purpose of these unit-specific conditions, is an individual boiler that has a capacity in excess of 250 mmBtu/hr that has the capability of firing coal, as well as other fuel materials, for which construction commenced prior to August 17, 1971, as described in Conditions 7.1.1 and 7.1.2.
- b. Startup Provisions

The Permittee is authorized to operate an affected boiler in violation of the applicable standards in Condition 5.2.2(b) (35 IAC 212.123), Condition

7.1.4(b) (35 IAC 212.202 and 212.203), Condition 7.1.4(c) (35 IAC 214.141), Condition 7.1.4(d) (35 IAC 216.121), and Condition 7.1.4(e) (35 IAC 217.141(b)) during startup subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262, as the Permittee "... has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual startups and frequency of startups.":

- i. This authorization only extends for a period of up to 24 hours following initial firing of fuel for each startup event.
  - ii. The Permittee shall conduct startup of an affected boiler in accordance with the manufacturers' written instructions or other written instructions maintained on site that are specifically developed to minimize excess emissions from startups and that include, at a minimum, the following measures:
    - A. Review of the operational condition of an affected boiler prior to initiating startup of the boiler.
    - B. Use of natural gas burners as needed to heat the affected boiler prior to initiating burning of coal.
    - C. Review of the operating parameters of an affected boiler during each startup as necessary to make appropriate adjustments to the startup to reduce or eliminate excess emissions.
    - D. Timely energization of the electrostatic precipitator as soon as this may be safely accomplished without damage or risk to personnel or equipment.
    - E. Appropriate Molten Sulfur injection to minimize excess emissions without damage or risk to personnel or equipment.
  - iii. The Permittee shall fulfill applicable recordkeeping requirements of Condition 7.1.9(h).
- c. Malfunction and Breakdown Provisions

The Permittee is authorized to continue operation of an affected boiler in violation of the applicable requirements of Condition 5.2.2(b) (35 IAC 212.123), Condition 7.1.4(b) (35 IAC 212.202 and 212.203), Condition 7.1.4(c) (35 IAC 214.141), Condition 7.1.4(d) (35 IAC 216.121), and Condition 7.1.4(e) (35

IAC 217.141(b)) in the event of a malfunction or breakdown of an affected boiler, including the coal pulverizer, the ash removal system, or the electrostatic precipitator (including flue gas conditioning) subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262 as the Permittee has submitted "... proof that continued operation is required to provide essential service, prevent risk of injury to personnel or severe damage to equipment.":

- i. This authorization only allows such continued operation as necessary to provide essential service or prevent risk of 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, or remove the affected boiler from service so that excess emissions cease. Unless the Permittee obtains an extension from the Illinois EPA, this shall be accomplished within 24 hours\* or noon of the Illinois EPA's next business day\*, whichever is later. The Permittee may obtain an extension for up to a total of 72 hours\* from the Illinois EPA, Air Regional Office unless extraordinary circumstances exist. The Illinois EPA, Air Compliance Section, in Springfield, may grant a longer extension if the Permittee demonstrates that unusual circumstances exist, the affected boiler can not reasonably be repaired or removed from service within the allowed time, it will repair the affected boiler or remove the boiler from service as soon as practicable; and it is taking reasonable steps to minimize excess emissions, based on the actions that have been and will be taken.

\* For this purpose and other related provisions, 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.

- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.1.9(i) and 7.1.10(b).

- 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.

#### 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.
  - i. The emissions of PM from Boiler B4 shall not exceed 0.10 lb/mmBtu of actual heat input, pursuant to 35 IAC 212.202.
  - ii. The emissions of PM from Boiler B5 shall not exceed 0.184 lb/mmBtu of actual heat input, pursuant to 35 IAC 212.203. This standard applies because the affected boiler qualifies for the alternative standard provided by this rule, as recognized by the Illinois Pollution Control Board in Regulatory Proceeding R82-1. In particular, in accordance with 35 IAC 212.203(a), as of April 14, 1972, the affected boiler had hourly emission rates based on the stricter of the original design or equipment performance test conditions that were less than 0.20 lb/mmBtu of actual heat input, i.e., 0.134 lb/mmBtu. Thereafter, under this rule, the emission rates are not allowed to degrade by more than 0.05 lb/mmBtu from the base emission rate, resulting in an emission standard of 0.184 lb/mmBtu.
- c. The emissions of SO<sub>2</sub> from each affected boiler shall not exceed 1.8 lb/mmBtu of actual heat input, pursuant to 35 IAC 214.141.
- d. The affected boilers are subject to 35 IAC 216.121 which provides that no person shall cause or allow the emission of CO into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.
- e. The emissions of NO<sub>x</sub> from each affected boiler shall not exceed 0.9 lb/mmBtu of actual heat input, pursuant to 35 IAC 217.141(b). The affected boilers are subject to a more stringent NO<sub>x</sub> emission standard pursuant to Section 407 of the Clean Air Act and 40 CFR Part 76, as addressed in Condition 6.2.2 and Attachment 5 of this permit.
- f.
  - i. During each ozone control period (May 1 through September 30):

- A. The emissions of NO<sub>x</sub> from an affected boiler 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).
  - B. The emissions of NO<sub>x</sub> from an affected boiler and other eligible EGU that are participating in a NO<sub>x</sub> averaging demonstration with an affected boiler as provided for by 35 IAC 217.708, shall not exceed 0.25 lbs/mmBtu of actual heat input, as averaged for the ozone control period for these EGU, pursuant to 35 IAC 217.708(a) and (b). For this purpose, other eligible EGU include: (1) other affected boilers, (2) other EGU owned and operated by the Permittee at its plants in Hennepin, Vermillion, Havana, and Baldwin (ID 155010AAA, 183814AAA, 125804AAB, and 157851AAA, respectively), which are also authorized by this permit to participate in a NO<sub>x</sub> averaging demonstration, and (3) 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 to the owner or operator of those EGU.
- ii. If the Permittee elects to have each affected boiler comply by participation in a NO<sub>x</sub> averaging demonstration as provided for and authorized above:
- A. Each 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(f) (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: Given the emission determination methods specified by 35 IAC 217.710, the emissions of NOx 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 NOx Trading Program.

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

- a. This permit is issued based on the affected boilers not being subject to the following New Source Performance Standards (NSPS) for steam generators because the affected boilers commenced construction before August 17, 1971 and have not been modified thereafter, based on the NSPS definition of modification:
  - i. NSPS for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971, 40 CFR 60 Subpart D.
  - ii. NSPS for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, 40 CFR 60 Subpart Da.
- b. This permit is issued based on the affected boilers not being subject to the following Illinois rules for new fuel combustion emission units, because each affected boiler was constructed prior to April 14, 1972 and have not been modified thereafter:
  - i. 35 IAC 212.122, Visible Emissions Limitations for Certain Emission Units for Which Construction or Modification Commenced on or After April 14, 1972.
  - ii. 35 IAC 212.204, Emission Units For Which Construction or Modification Commenced On or After April 14, 1972.
  - iii. 35 IAC 214.121, Large New Fuel Combustion Emission Sources.
  - iv. 35 IAC 217.121, New Fuel Combustion Emission Sources.
- c.
  - i. The Permittee is shielded from the following rules for the affected boiler 5 when the boiler is using solid fuel (coal) as its principle fuel:
    - A. 35 IAC 212.202, because the affected boiler 5 qualifies for the alternative

limit pursuant to 35 IAC 212.203 (See Condition 7.1.4(b)).

- ii. If an affected boiler is not using solid fuel (coal) as its principle fuel, the affected boiler shall comply with the requirements of the following conditions. During such periods, Condition 7.1.5(c) (ii) (A), below for PM, shall substitute for Condition 7.1.4(b) and Condition 7.1.5(c) (ii) (B), below for SO<sub>2</sub>, shall supplement Condition 7.1.4():
  - 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.
  - 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.
- 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 natural gas is only used in incidental amounts for specific purposes, such as startup, opacity reduction emission mitigation, flame stabilization, outage of a coal pulverizer, or other temporary interruption in solid fuel supply, as associated with routine firing of solid fuel. A boiler shall not be considered to be using solid fuel as its principal fuel if natural gas is used in more than incidental amounts or solid fuel (coal) is used in incidental amounts.
- 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.

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

- a. The Permittee shall limit the amount of alternate fuel used as follows:
  - i. Alternate fuels shall not exceed 3% by weight of the total fuel supply to each affected boiler unless:

- A. Particulate matter emission testing for each alternate fuel stream (e.g., plastics, biomass, clean wood) conducted in accordance with applicable U.S. EPA reference test methods under 40 CFR Part 60, Appendix A shows compliance with applicable particulate matter emission standards. Thereafter, operation shall stay within the level during testing; or
- B. For the purposes of emissions testing and preparation for emission testing to demonstrate compliance at a higher level of alternate fuel supplied to the boiler, in which case operation shall be consistent with the test plan.
  - ii. In no case the burning of petroleum coke blended fuel in each affected boiler shall exceed 30 percent petroleum coke.
  - iii. Compliance with these above limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
  - iv. The above limitations were established in the Permits 73020062 and 73010719.
- c. Combustion of waste materials and fuels other than coal or natural gas may not be initiated during periods of startup, malfunction, or breakdown. If a malfunction or breakdown should occur while the material is being combusted, the loading of the material/coal mixture to the bunker shall be discontinued until the malfunction or breakdown is corrected.

#### 7.1.7 Testing Requirements

Pursuant to Section 39.5(7)(d)(ii) of the Act, the Permittee shall measure the PM and CO emissions of each affected boiler as specified below:

- a. i. PM emission measurements shall be made under the following circumstances:
  - A. Prior to April 1, 2007.
  - B. Within 90 days of operating an affected boiler for more than 24 hours total in a calendar quarter at a load\* that is more than 2 percent higher than the greatest load on the boiler, during the most recent set of PM tests on the affected boiler in which compliance is shown (refer to Condition 7.1.7(e)(iii)(D)).

Notwithstanding, 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) or waive this requirement (if other information, e.g., the margin of compliance shown by previous testing, indicates compliance at such higher load).

\* 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).

- ii. Measurements of CO emissions shall be made as follows:
    - A. In conjunction with the initial measurements of PM emissions as required above, if not otherwise performed earlier in conjunction with emission testing or relative accuracy testing for SO<sub>2</sub> or NO<sub>x</sub>.
    - B. In conjunction with the subsequent measurements of PM emissions, unless performed in conjunction with prior testing for SO<sub>2</sub> or NO<sub>x</sub> or the previous CO measurement is no more than 100 ppm at 50 percent excess air, in which case CO measurements need not accompany the next PM measurements following the measurement in which CO emissions were shown to be no more than 100 ppm.
  - iii. Measurements of PM and CO emissions shall be made within 90 days (or such later date set by the Illinois EPA) following a reasonable 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 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 Method 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 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 283.230.
  - 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 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. Control equipment information, i.e., equipment condition and operating parameters during testing.
  - D. 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 opacity data (6-minute averages) measured during testing.

#### 7.1.8 Monitoring Requirements

- a. Pursuant to 35 IAC 201.401(a)(1)(A), the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boilers.
  - i. This monitoring equipment shall be operated pursuant to written monitoring procedures that include a quality assurance/control plan, which procedures shall reflect the manufacturer's instructions as adapted by the Permittee based on its experience.
  - ii. This monitoring equipment shall meet the performance specifications and operating requirements in Sections 3.1 through 3.8 of 40 CFR 51, Appendix P (1987), pursuant to 35 IAC 201.401(b).
  - iii. These monitors shall be the primary basis for quarterly reporting of exceedances of Conditions

5.2.2(b) and 7.1.4(a), in accordance with 35 IAC 201.405 (See Condition 7.1.10(a)).

- iv. Notwithstanding the above, monitoring pursuant to 35 IAC 201.401 is not applicable during any period of a monitoring system or device malfunction if the Permittee demonstrates that the malfunction was unavoidable and is being repaired as expeditiously as practicable, pursuant to 35 IAC 201.404.
- b. Pursuant to Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of SO<sub>2</sub> from the affected boilers which 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. This monitoring equipment shall be operated pursuant to written monitoring procedures that include a quality assurance/control plan, which procedures address the requirements in 40 CFR Part 75.
- c. Pursuant to 35 IAC 217.710(a), the Permittee, shall install, calibrate, maintain and operate continuous emissions monitoring systems (CEMS) for the measurements of NO<sub>x</sub> from the affected boilers, in accordance with the requirements of 40 CFR 75 Subpart B.
- d. Pursuant to Sections 412 and 821 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)

#### 7.1.9 Recordkeeping Requirements

##### a. Records for Boiler Operation

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

- i. Load (in terms of either gross megawatts output or steam flow) on an hourly basis for each affected boiler.

- ii. Records for each day when a fuel material other than coal, or gas was 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) for each affected boiler.
  - iv. Amount of coal consumed (tons/quarter).
  - v. Amount of each other fuel material consumed (tons, gallons, cubic feet per quarter, as appropriate).
  - vi. If the Permittee is relying on data for heat input for purposes of compliance with Condition 7.1.4(b) (35 IAC Part 212 Subpart E) that is different from that recorded pursuant to the federal Acid Rain Program, heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load as recorded pursuant to Condition 7.1.9(a) (i) to hourly heat input.
- b. Records for Control Device(s)

Pursuant to Section 39.5(7) of the Act, the Permittee shall maintain the following records for the control devices(s) on each affected boiler:

- i. Electrostatic Precipitators (ESP)

Data shall be recorded at least once per shift for the ESP for the following operating parameters when each affected boiler is in operation. For this purpose, if numerical data is not displayed in the control room, the Permittee may record the status of the individual fields, provided that numerical data is recorded at least once per day:

  - A. Fields in service.
  - B. Primary voltages and currents.
  - C. Secondary voltages and currents.
  - D. Sparking rates.
- ii. Flue Gas Conditioning by SO<sub>3</sub> Injection
  - A. Manufacture/vendor or site developed operating and maintenance procedures.

- B. Operating and maintenance logs, including usage of Molten Sulfur (lbs/hour and tons/year).

c. Records for Continuous Opacity Monitoring Systems

Pursuant to 35 IAC 201.407 and Section 39.5(7)(b) of the Act, the Permittee shall maintain records for the opacity monitoring system on each affected boiler required by Condition 7.1.8(a) that as 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(a) and (e).
- ii. Records for each affected boiler that identify the upper bound of the normal range of opacity measurements from the boilers, considering an hour of operation, within which compliance with Condition 7.1.4(b) is assured, with supporting explanation and documentation. At a minimum, these records shall be reviewed and revised as necessary following performance of additional PM emission tests on an affected boiler.
- iii. Records to indicate compliance with Conditions 5.2.2(b), 7.1.4(a) and 7.1.4(b), including:
  - A. Each 6-minute period when the opacity was above the limitation of Conditions 5.2.2(b) and 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 hour when the measured opacity of each affected boiler was above the normal range, as specified above in Condition 7.1.9(c) (ii), 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) (b) of the Act, the Permittee shall maintain records for the SO<sub>2</sub> monitoring system on each affected boiler required by Condition 7.1.8(b) that as a minimum shall include:

- i. Operating records for each SO<sub>2</sub> monitoring system, 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 an SO<sub>2</sub> monitor for a stack was inoperative, with date, time and reason.
  - G. Data reduction information used pursuant to Condition 7.1.12(c).
  - H. Quarterly reports submitted in accordance with Condition 7.1.10(a) (i) (F).
- ii. Records to verify compliance with the limitation of Condition 7.1.4(c), including:
  - A. SO<sub>2</sub> emissions (lb/hour) from the affected boilers on an hourly basis, as derived from the data obtained by the SO<sub>2</sub> monitoring equipment.
  - B. The date and time of any three-hour block averaging period when the total SO<sub>2</sub> emission rate, as recorded above, exceeded 1.8 lb/mmBtu of heat input 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 at least quarterly as needed to verify compliance with the limitation of Condition 7.1.4(c).

e. Records for Continuous NOx Monitoring

The Permittee shall maintain records for the NOx monitoring system on each affected boiler required by Condition 7.1.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, pursuant to 35 IAC 217.712(a), as a minimum shall include:

- i. Operating records for each NOx monitoring system, including:
  - A. NOx 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 an NOx monitor for a stack was inoperative, with date, time and reason.
  - G. Data reduction information used pursuant to Condition 7.1.12(e).
  - H. Quarterly reports submitted in accordance with Condition 7.1.10(a) (i) (F).
- ii. The Permittee shall maintain records for the NOx monitoring system on each affected boiler required by Condition 7.1.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, pursuant to 35 IAC 217.712(a).
- iii. The Permittee shall keep records as needed to demonstrate compliance with Condition 7.1.6(c) of the NOx emissions from all the natural gas ignitors installed on the affected boilers (tons/month and tons/year) with supporting calculations.

f. Acid Rain Program

Records for the continuous emission monitoring required for 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 6.2.3]

g. Records for Startups

Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records, related to startup of each affected boiler that at a minimum shall include the following:

- i. Records of the source's established startup procedures for each affected boiler (as summarized in the CAAPP application).
- ii. Records for each startup of an affected boiler that may result in excess opacity or PM emissions, including:
  - A. Date and description of startup, e.g., startup following scheduled maintenance outage.
  - B. Duration of the startup, from initial firing of fuel to achievement of normal operation, i.e., stable operation firing the principal fuel with control equipment operating to enable compliance.
  - C. If normal operation is not achieved within 16 hours or if established startup procedures are not followed:
    - I. An explanation why startup could not be completed sooner or established procedures could not be followed.
    - II. Documentation for the established startup procedures that were followed.
    - III. The time at which solid fuel (coal) firing was begun.
    - IV. The flue gas temperature at which the electrostatic precipitator was energized, if coal was fired before the electrostatic precipitator was energized.
    - V. Molten Sulfur usage during startup
    - VI. Estimates of magnitude of PM emitted in excess of the applicable PM standard during startup.

h. Records for Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263, the Permittee shall maintain records, related to malfunction and breakdown for each affected boiler that as a minimum, shall include:

- i. A maintenance and repair log for each affected boiler and associated equipment, listing activities performed with date.
- ii. Records for each incident when operation of an affected boiler continued during malfunction or breakdown with excess emissions, as provided by Condition 7.1.3(c), including the following information:
  - A. Date and duration of malfunction or breakdown.
  - B. A description of the malfunction or breakdown.
  - C. The corrective actions used to reduce the quantity of emissions and the duration of the incident.
  - D. Confirmation of fulfillment of the requirements of Condition 7.1.10(b), as applicable, including copies of follow-up reports submitted pursuant to Condition 7.1.10(b)(ii).
  - E. If excess emissions occurred for two or more hours:
    - I. An explanation why continued operation of the affected boiler was necessary.
    - II. The preventative measures planned or taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
    - III. An estimate of the magnitude of excess emissions occurring during the incident.

7.1.10 Reporting Requirements

a. Quarterly Operating Report

In place of the semi-annual reports required by General Permit Condition 8.6.1, the Permittee shall

provide a quarterly operating report to the Illinois EPA pursuant to Section 39.5(7) (b) of the Act.

- i. This report shall include the following information for operation 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 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. The number of startups for each affected boiler.
  - E. A summary of the records required by Condition 7.1.9(h) (ii) for incidents when operation of an affected boiler continued during malfunction or breakdown with excess emissions that are not addressed by individual reports submitted pursuant to Condition 7.1.10(b) (ii). (See also notification and reporting requirements for individual incidents in Condition 7.1.10(b).)
  - F. The information related to SO<sub>2</sub> and NO<sub>x</sub> emissions during the quarter specified by Condition 7.1.10(c) and 7.1.10(d).
  - G. The information related to opacity and particulate matter emissions during the quarter specified by Condition 7.1.10(e).
  - H. A summary of other noncompliance as separately reported pursuant to Condition 7.1.10(g) (ii).
- ii. This report shall be submitted promptly 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

b. Reporting of Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263, 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 continued during malfunction or breakdown with excess emissions as addressed by Condition 7.1.3(c). These requirements do not apply to such excess emissions, if any, that occur during shutdown of the affected boiler.

- i. The Permittee shall notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) as soon as possible during normal working hours for each incident in which the opacity from an affected boiler exceeds 30 percent for more than five consecutive 6-minute averaging periods unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds 30 percent for less than six 6-minute averaging periods in a row, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.1.10(a)(i)(E).)
- ii. Upon conclusion of each incident that is two hours or more in duration, 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 of an affected boiler 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 boiler was taken out of service.

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

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

- i. Summary information on the performance of each SO<sub>2</sub> monitoring system, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the continuous SO<sub>2</sub> monitoring system 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 monitoring system 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 monitoring system was inoperative except for zero and span checks, and the nature of system 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 system 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 limitation 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).
  - D. The cause of the excess emissions, if known.
  - E. 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 a three-hour block emission averages during which the limitation was exceeded.

d. Reporting of NOx Emissions

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

- i. Summary information on the performance of each NOx monitoring system, including the information

for a "Summary Report" specified by 40 CFR 60.7(d). When the continuous NOx monitoring system 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 monitoring system 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 monitoring system was inoperative except for zero and span checks, and the nature of system 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 system was out-of-control as addressed by 40 CFR 75.24.

iii. The following information for each period when NOx emissions were in excess of the limitation in Condition 7.1.4(e)\*. When there were no such exceedances, this shall be stated in the report.:

- A. The starting date and time of the NOx 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(e) (ii).
- D. The cause of the excess emissions, if known.
- E. Corrective actions and actions taken to lessen the emissions.

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

e. Reporting of Opacity and Particulate Matter Emissions

Pursuant to 35 IAC 201.405 and 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 operating report pursuant to Condition 7.1.10(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 limitations in Conditions 5.2.2(b) and 7.1.4(a):
  - A. The starting dates and time of the excess opacity.
  - B. The duration of the excess opacity.
  - C. The magnitude of excess opacity, based on six minute average opacity, including:
    - I. The percent opacity for each 6 minute increment.
    - II. The start and stop time of each six minute increment in excess of the limitation.
  - D. The cause of the excess opacity, if known, including which boiler(s) were contributing to excess opacity and whether such excess emissions occurred during startup or malfunction/breakdown of the boiler.
  - E. Corrective actions and actions taken to lessen the emissions.
- iv. The following information for each period when particulate matter 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. The starting dates and time of the excess emissions.

- B. The duration of the excess emissions.
  - C. The magnitude of excess emissions.
  - D. The information or means by which excess emissions were indicated or identified.
  - E. The cause of the excess emissions, if known, including which affected boiler(s) were contributing to excess emissions and whether such excess emissions occurred during startup or malfunction/breakdown of the affected boiler(s).
  - F. Corrective actions and actions taken to lessen the emissions.
- f. The Permittee shall submit a report by November 30 of each year, to the Illinois EPA that demonstrates that each affected boiler has complied with Condition 7.1.4(f). These reports shall be accompanied by a certification statement signed by a responsible official for the Permittee as specified by 35 IAC 217.712(c), pursuant to 35 IAC 217.712(c), (d), and (e).
- i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.1.4(f) (i) (A), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and NOx emissions of the unit for the ozone control period.
  - ii. If the Permittee is demonstrating compliance by means of "NOx averaging" as authorized by Condition 7.1.4(f) (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 NOx averaging demonstration, the Permittee shall report the following:
      - I. Identification of the other EGU that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.1.10(f) (ii) (B) below.

II. A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).

III. The average NOx 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 NOx emissions of the unit for the ozone control period.

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

B. If the Permittee is the lead party for a NOx averaging demonstration, the Permittee shall report the following:

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

II. The averaged NOx emission rate for all EGU participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e) (1).

III. A statement whether the demonstration shows compliance.

g. Prompt Reporting of Deviations

For the affected boiler, 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. Reporting as specified above in Conditions 7.1.10(b), (c), (d), and (e) for deviations from Conditions 5.2.2(b) and 7.1.4.
  - ii. Notification within 30 days for a deviation from Condition 7.1.6, if any, with a copy of applicable records for such incident or description of the incident and a discussion of the probable cause of such deviation, the corrective actions taken, and the preventative measures taken.
  - iii. Reporting of deviations with the quarterly reports required by Condition 7.1.10(a) for deviations from other applicable requirements, e.g., monitoring and recordkeeping requirements. For this purpose, these reports shall include a description of each incident, a discussion of the probable cause of the deviation, the corrective actions taken, and the preventative measures taken.
- h. Acid Rain Program Reporting

Pursuant to Sections 412 and 821 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.

#### 7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to each affected boiler without prior notification to the Illinois EPA or revision of this permit. 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 air pollution control equipment, which is addressed by a separate construction permit.
- b. Firing of the following:
  - i. Coal or a mix of coal from different suppliers.

- ii. Natural gas
- iii. Used oil, boiler cleaning residue, and other wastes generated at the source in conjunction with firing of coal. (Note: Other requirements may also apply to such materials as they constitute waste.)
- iv. Alternative fuels, such as petroleum coke, that were not generated from hazardous waste or contain polyvinyl chloride (PVC) material, in conjunction with coal.
- v. Fuel quality non-hazardous waste generated off site or non-hazardous waste from a remediation project in which the Permittee is a responsible party, in conjunction with coal, provided that such wastes are shipped to the source in homogeneous form (e.g., a shipment of used tires or a shipment of corn, and provided that such waste can be accommodated with the existing burners in the boiler(s).

Note: Other requirements unrelated to air pollution control may apply to firing of wastes and waste material, including prior approval of the firing of such waste from the local government, pursuant to Section 39.2 of the Act, as the source would then be considered a pollution control facility.

#### 7.1.12 Compliance Procedures

- a. i. Compliance with the opacity limitation of Conditions 5.2.2(b) 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 system operated in accordance with the requirements of Condition 7.1.8(a) and the recordkeeping requirements of Conditions 7.1.9(c).
- 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 affected boiler 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.

- B. Have the capability to review such short-term opacity data to identify:
    - I. For each affected boiler, any hour in which opacity, exceeded 30 percent, and then, in such hour the duration of opacity in excess of 30 percent; whether opacity ever exceeded 60 percent; and whether the duration of opacity in excess of 30 percent was more than 8 minutes in aggregate.
    - II. For each affected boiler, whether opacity in excess of 30 percent occurred in more than three hours in a 24 hour period.
    - III. For each affected boiler, whether opacity exceeded 30 percent for more than an hour.
  - C. In the reports required by Condition 7.1.10(e), 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 an affected boiler did not violate Conditions 5.2.2(b) and 7.1.4(a) even though opacity on a 6-minute average exceeded 30 percent.
  - D. 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 limitation 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).
  - 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 limitation of Condition 7.1.4(d) is addressed by emission testing in

accordance with Condition 7.1.7. Further compliance procedures are not set by this permit as compliance is assumed to be inherent in operation of an affected boiler under operating conditions other than startup or shutdown.

- e. Compliance with NO<sub>x</sub> emission limitations of Conditions 7.1.4(e) and 7.1.4(f) is addressed by the recordkeeping required by Condition 7.1.9(e).
- f. Compliance with the limitations of Condition 7.1.6 is addressed by the emission testing, monitoring, and recordkeeping required by Conditions 7.1.

## 7.2 Coal Handling Equipment

### 7.2.1 Description

The Permittee transfers and stores coal in a series of operations, including truck unloading, railcar unloading, barge 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 7.3). Particulate matter (PM) emissions associated with these operations are controlled by various measures including the moisture content of the coal, application of dust suppressant to the coal, enclosures and covers, and dust collection devices.

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

The following is a list of the coal handling operations and associated emission control systems at the source:

#### Coal Receiving Operations

Truck Unloading, Railcar Unloading, and Barge Unloading  
Coal Transfer Conveyors  
Dust Suppressant Application System, Enclosures and Covers

#### Coal Crushing House

Coal Transfer Conveyors  
Dust Suppressant Application System, Dust Collection  
Devices, Enclosures and Covers

#### Coal Storage Operations

Outdoor Storage Piles  
Coal Transfer Conveyors  
Coal Storage Bunkers  
Dust Suppressant Application System, Dust Collection  
Devices, Enclosures and Covers

### 7.2.3 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 7.2.1 and 7.2.2.
- b. The Permittee is authorized to continue operation of an affected operation in violation of the applicable requirements of Conditions 5.2.2(b) (35 IAC 212.123) and 7.2.6(b) in the event of a malfunction or

breakdown of an affected operation subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262 as the Permittee has submitted "... proof that continued operation is required to provide essential service, prevent risk of injury to personnel or severe damage to equipment.":

- i. This authorization only allows such continued operation as necessary to provide essential service, prevent risk of 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 repair the affected operation or remove the affected operation from service so that excess emissions cease. Unless the Permittee obtains an extension from the Illinois EPA, this shall be accomplished within 24 hours\* or noon of the Illinois EPA's next business day\*, whichever is later. The Permittee may obtain an extension for up to a total of 72 hours\* from the Illinois EPA, Air Regional Office unless extraordinary circumstances exist. The Illinois EPA, Air Compliance Section, in Springfield, may grant a longer extension if the Permittee demonstrates that unusual circumstances exist, the affected operation can not reasonably be repaired or removed from service within the allowed time, the affected operation can not be repaired or removed from service as soon as practicable; and the Permittee is taking reasonable steps to minimize excess emissions, based on the actions that have been and will be taken.

\* For this purpose and other related provisions, 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 affected operation out of service.
- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.2.9(h) and 7.2.10(b).
- 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.

7.2.4 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 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.

7.2.5 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected operations not being subject to the New Source Performance Standards (NSPS) for Coal Preparation Plants, 40 CFR Part 60, Subparts A and Y, because the affected operations commenced construction or modification before October 24, 1974.
- b. 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.
- c. This permit is issued based on the affected operations not being subject to the requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the individual affected operations do not meet the criteria of 40 CFR 64.2(a), i.e., the potential pre-control device emissions of particulate matter from each affected operation do not equal or exceed major source threshold levels.

7.2.6 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, and use of dust collection devices, that minimize visible emissions of particulate matter and provide a reasonable assurance of compliance with the applicable emission standards in Conditions 7.2.4 and 7.2.6, 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 Condition 7.2.9(b).

- b. i. The affected operations shall not exceed the following throughput limits:
  - A. The amount of coal received by the railcar shall not exceed 4.38 million tons per year.
  - B. The amount of coal handled by the transfer/conveying system shall not exceed 4.38 million tons/year.
  - C. The size of the coal storage pile shall not exceed 0.4 million tons.
- ii. The amount of coal received by the upgraded barge system shall not exceed the following limits.
  - A. 2.4 million tons provided that no more than 0.4 million tons were controlled with water suppression and chemical dust suppression is used for the remainder;
  - B. 2.55 million tons provided that no more than 0.3 million tons controlled with water suppression and chemical dust suppression is used for the remainder;
  - C. 2.7 million tons provided no more than 0.2 million tons were controlled with water suppression chemical dust suppression is used for the remainder;
  - D. 2.85 million tons provided that no more than 0.1 million tons were controlled with water suppression and chemical dust suppression is used for the remainder; and
  - E. 3.0 million tons provided that chemical dust suppression is used for all receiving.
- iii. The affected operations shall not exceed the following throughput and PM emissions limits:

<u>Operation</u>	<u>Throughput (Tons)/(Year)</u>	<u>PM Emissions (Tons)/(Year)</u>
Coal Storage	400,000 <sup>1</sup>	9.0
Transferring & Conveying	4,380,000	3.15
Reclaim Hopper	4,380,000	12.6
Railcar Hopper	4,380,000	2.3
Barge Hopper	3,000,000 <sup>2</sup>	120.0

1 The size of the coal storage pile.

2 Maximum throughput ranges from 2.4 to 3.0 million tons/year (see Condition 7.2.6(b) (ii)).

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

Note: The above limits were established in the Construction Permit 01060001 based on the information provided in the application.

7.2.7 Testing Requirements

None

7.2.8 Inspection Requirements

The Permittee shall perform inspections of the affected operations on at least a monthly basis, including associated control measures, while the affected operations are in use, to confirm compliance with the requirements of Condition 7.2.6(a). These inspections may be scheduled so that only a number of affected operations are reviewed during each inspection, provided however, that all affected operations shall be inspected at least once during each calendar quarter, pursuant to Section 39.5(7) (a) of the Act.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected operations, pursuant to Section 39.5(7) (b) of the Act:

- a. The Permittee shall keep a record, which shall be kept up to date, of the maximum operating capacity of each affected operation.
- b. The Permittee shall maintain a record, which shall be kept up to date, of the control measures of the affected operations currently being implemented pursuant to Condition 7.2.6(a). These control measures are referred to as the "established control measures" in this subsection of this permit.
- c. The Permittee shall maintain the following operating records:
  - i. The amount of coal and other solid fuels received at the source, by type of fuel (tons/month and tons/year).

- ii. The amount of coal and other solid fuels sent to the outdoor storage piles, by type of fuel (tons/month and tons/year).
  - iii. The amount of coal or other solid fuel received by railcar (tons/month and tons/year).
  - iv. The amount of coal or other solid fuel received by barge (tons/month and tons/year) including the amount of coal or other solid fuel received by barge but not controlled by chemical dust suppression (tons/month and tons/year).
  - v. The amount of coal handled by the transfer and conveying system (tons/month and tons/year).
- d. The Permittee shall maintain records of the following for the inspections required by Condition 7.2.8:
- i. Date and time the inspection was performed and name(s) of inspection personnel.
  - ii. Area or specific operations inspected.
  - iii. The observed condition of the established control measures for the inspected area or operations.
  - iv. 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.
  - v. A summary of compliance compared to the established control measures.
- e. The Permittee shall maintain records of the following for each incident when any affected operation operated without the established control measures:
- i. The date of the incident and identification of the affected operations that were involved.
  - ii. A description of the incident, including the established control measures that were not present or implemented; the established control measures that were present, if any; 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 operations continued to operate before established control measures were in place or the operations were shutdown (to resume operation only after established control measures were in place) and, if this time was more than one hour, an explanation why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.
  - v. The estimated total duration of the incident, i.e., the total length of time that the affected operations ran without established control measures and the estimated amount of coal handled during the incident.
  - vi. A discussion of the probable cause of the incident and any preventative measures taken.
  - vii. A discussion whether Condition 7.2.4(b) may have been violated during the incident, with supporting explanation as needed.
- f. The Permittee shall keep a maintenance and repair log for each item of air pollution control equipment, i.e., each dust suppressant application system and each dust collection device, associated with affected operations. This log shall list the date and nature of maintenance and repair activities performed on the item of equipment. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
- g. To demonstrate compliance with Condition 7.2.6(b), the Permittee shall keep records for PM emissions from coal storage pile, coal transferring & conveying, reclaim hopper, barge unloading, and railcar unloading operations (tons/month and tons/year), with supporting calculations.
- h. Records for Continued Operation During Malfunctions And Breakdowns
- Pursuant to 35 IAC 201.263, the Permittee shall maintain records, related to malfunction and breakdown for affected operations that as a minimum, shall include:
- i. A maintenance and repair log for each affected operation and associated equipment, listing activities performed with date.

- ii. Records for each incident when operation of an affected operation continued during malfunction or breakdown with excess emissions, as provided by Condition 7.2.3(b), including the following information:
  - A. Date and duration of malfunction or breakdown.
  - B. A description of the malfunction or breakdown.
  - C. The corrective actions used to reduce the quantity of emissions and the duration of the incident.
  - D. Confirmation of fulfillment of the requirements of Condition 7.2.10(b), as applicable, including copies of follow-up reports submitted pursuant to Condition 7.2.10(b) (ii).
  - E. If excess emissions occurred for two or more hours:
    - I. An explanation why continued operation of the affected operation was necessary.
    - II. The preventative measures planned or taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
    - III. An estimate of the magnitude of excess emissions occurring during the incident.

#### 7.2.10 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. Notification within 30 days for operation of an affected operations that was not in compliance with applicable requirements in Conditions 7.2.6(b) 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 7.2.9(e).

- ii. Notification with the quarterly reports required by Condition 7.1.10(a) for other deviations, including deviations from applicable emission standards, inspection requirements and recordkeeping requirements.

b. Reporting of Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263, 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 operation continued during malfunction or breakdown with excess emissions as addressed by Condition 7.2.3(b).

- i. The Permittee shall notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) as soon as possible during normal working hours for each incident in which the opacity from an affected operation exceeds 30 percent for more than five consecutive 6-minute averaging periods. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds 30 percent for less than five consecutive 6-minute averaging periods in a row, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.2.10(a)(ii).
- ii. Upon conclusion of each incident that is two hours or more in duration, 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 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.

7.2.11 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. 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.

#### 7.2.12 Compliance Procedures

- a. Compliance with Conditions 7.2.4(a) and (b) is addressed by the control, inspection, and recordkeeping required by Conditions 7.2.6(a), 7.2.8, and 7.2.9, respectively.
- b. Compliance with Condition 7.2.6(b) is determined based on the control, inspection, and recordkeeping required by Conditions 7.2.6(a), 7.2.8, and 7.2.9, respectively, and published emission factors for uncontrolled PM emissions, efficiency of control measures, and controlled PM emissions.

7.3 Coal Processing Equipment

7.3.1 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, application of dust suppressant to the coal, enclosures and covers, and dust collection devices.

7.3.2 List of Emission Units and Air Pollution Control Equipment

The following is a list of the coal processing equipment and associated control systems at the source. These processing equipment were all constructed prior to April 14, 1972.

Emission Unit	Description	Emission Control Equipment
Breaker Building Crushers	Coal Crushing Operation	Enclosures and Covers, Dust Suppressant Application, and Dust Collection Devices

7.3.3 Applicability Provisions

- a. An "affected process" for the purpose of these unit-specific conditions, is an individual process emission unit that prepares coal for use as a fuel by crushing the coal as described in Conditions 7.3.1 and 7.3.2.
- b. The Permittee is authorized to continue operation of an affected process in violation of the applicable requirements of Condition 5.2.2(b) (35 IAC 212.123) and Condition 7.3.4(c), in the event of a malfunction or breakdown of an affected process subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262 as the Permittee has submitted "... proof that continued operation is required to provide essential service, prevent risk of injury to personnel or severe damage to equipment.":
  - i. This authorization only allows such continued operation as necessary to provide essential service, prevent risk of 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 repair the affected process or remove the affected process from service so that excess emissions cease. Unless the Permittee obtains an extension from the Illinois EPA, this shall be accomplished within 24 hours\*

or noon of the Illinois EPA's next business day\*, whichever is later. The Permittee may obtain an extension for up to a total of 72 hours\* from the Illinois EPA, Air Regional Office unless extraordinary circumstances exist. The Illinois EPA, Air Compliance Section, in Springfield, may grant a longer extension if the Permittee demonstrates that unusual circumstances exist, the affected process can not reasonably be repaired or removed from service within the allowed time, the affected process can not be repaired or removed from service as soon as practicable; and the Permittee is taking reasonable steps to minimize excess emissions, based on the actions that have been and will be taken.

\* For this purpose and other related provisions, 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 affected process out of service.

- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.3.9(h) and 7.3.10(b).
- 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.

#### 7.3.4 Applicable Emission Standards

- a. The affected processes 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 processes, pursuant to 35 IAC 212.301.
- b. The affected processes shall comply with the standard in Condition 5.2.2(b), which addresses the opacity of the emission of smoke or other particulate matter from the affected processes, pursuant to 35 IAC 212.123.
- c. The affected processes are subject to 35 IAC 212.322(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 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 (see also Attachment 2) [35 IAC 212.322(a)].

7.3.5 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 Coal Preparation Plants, 40 CFR Part 60, Subparts A and Y, because the affected processes commenced construction or modification before October 24, 1974.
- b. This permit is issued based on the affected processes not being subject to the requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the individual affected process does not meet the criteria of 40 CFR 64.2(a), i.e., the potential pre-control device emissions of particulate matter from each affected process do not equal or exceed 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 processes, such as enclosure, natural surface moisture, application of dust suppressant, and use of dust collection devices, that minimize visible emissions of particulate matter and provide a reasonable assurance of compliance with the applicable emission standards in Conditions 7.3.4 pursuant to Section 39.5(7) (a) of the Act.
- ii. The Permittee shall operate and maintain each affected process with the control measures identified in Condition 7.3.9(b).

7.3.7 Testing Requirements

None

7.3.8 Inspection Requirements

The Permittee shall perform inspections of each affected process on at least on a monthly basis, including associated control measures, to confirm compliance with the requirements of Condition 7.3.6(a).

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected processes, pursuant to Section 39.5(7) (b) of the Act:

- a. The Permittee shall keep a record, which shall be kept up to date, of the maximum operating capacity of the affected processes.
- b.
  - i. The Permittee shall maintain a record, which shall be kept up to date, of the control measures of the affected processes currently being implemented pursuant to Condition 7.3.6(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 practices are sufficient to assure compliance with Condition 7.3.4(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 (see also Condition 7.3.12).
- c. The Permittee shall maintain records of the following for the inspections required by Condition 7.3.8, for each affected process:
  - i. Date and time the inspection was performed and name(s) of inspection personnel.
  - ii. Area or specific operations inspected.
  - iii. The observed condition of the established control measures for the inspected area or operations.
  - iv. 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.
  - v. A summary of compliance compared to the established control measures.
- 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 coal processed during the incident.
  - vi. A discussion of the probable cause of the incident and any preventative measures taken.
  - vii. A discussion whether Condition 7.3.4(b) may have been violated during the incident, with supporting explanation as needed.
- e. The Permittee shall keep a maintenance and repair log for each item of air pollution control equipment, i.e., each dust suppressant application system and each dust collection device, associated with affected process(es). This log shall list the date and nature of maintenance and repair activities performed on the item of equipment. (See also Condition 9.6.1, Control Equipment Maintenance Records.)
  - f. Records for Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263, the Permittee shall maintain records, related to malfunction and breakdown for an affected process that as a minimum, shall include:

- i. A maintenance and repair log for each affected process and associated equipment, listing activities performed with date.
- ii. Records for each incident when operation of an affected process continued during malfunction or breakdown with excess emissions, as provided by Condition 7.3.3(b), including the following information:
  - A. Date and duration of malfunction or breakdown.
  - B. A description of the malfunction or breakdown.
  - C. The corrective actions used to reduce the quantity of emissions and the duration of the incident.
  - D. Confirmation of fulfillment of the requirements of Condition 7.3.10(b), as applicable, including copies of follow-up reports submitted pursuant to Condition 7.3.10(b)(ii).
  - E. If excess emissions occurred for two or more hours:
    - I. An explanation why continued operation of the affected process was necessary.
    - II. The preventative measures planned or taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
    - III. An estimate of the magnitude of excess emissions occurring during the incident.

#### 7.3.10 Reporting Requirements

##### a. Reporting of Deviations

For the affected processes, the Permittee shall notify the Illinois EPA of deviations from permit requirements including deviations from applicable emission standards, inspection requirements and recordkeeping requirements with the quarterly reports required by Condition 7.1.10(a). 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.

b. Reporting of Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263, 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 process continued during malfunction or breakdown with excess emissions as addressed by Condition 7.3.3(b).

- i. The Permittee shall notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) as soon as possible during normal working hours for each incident in which the opacity from an affected process exceeds 30 percent for more than five consecutive 6-minute averaging periods. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds 30 percent for less than five consecutive 6-minute averaging periods in a row, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.3.10(a).
- ii. Upon conclusion of each incident that is two hours or more in duration, 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 of an affected process 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.

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 processes without prior notification to the Illinois EPA or revision of this permit. 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.

#### 7.3.12 Compliance Procedures

- a. Compliance with Conditions 7.3.4(a) and (b) is addressed by the control, inspection, and recordkeeping required by Conditions 7.3.6(a), 7.3.8, and 7.3.9, respectively.
- b. Compliance with Condition 7.3.4(c) is determined based on the control, inspection, and recordkeeping required by Conditions 7.3.6(a), 7.3.8, and 7.3.9, respectively, and published emission factors for uncontrolled PM emissions, efficiency of control measures, and controlled PM emissions as identified in the records required by Condition 7.3.9(b) or by the use of measured emissions factors.

## 7.4 Fly Ash Equipment

### 7.4.1 Description

The Permittee operates a fly ash removal system. Associated particulate matter (PM) emissions are controlled by various control measures including, moisture content of the fly ash, enclosures and covers, and dust collection devices.

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

The following is a list of the fly ash equipment and associated emission control systems at the source:

Fly Ash Conveying  
Fly Ash Hoppers  
Fly Ash Loading  
Dust Collection Devices, and 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 that transfers fly ash as described in Conditions 7.4.1 and 7.4.2.
- b. The Permittee is authorized to continue operation of an affected process in violation of the applicable requirements of Condition 5.2.2(b) (35 IAC 212.123), Condition 7.4.4(c), and Condition 7.4.6(b) in the event of a malfunction or breakdown of an affected process subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262 as the Permittee has submitted "... proof that continued operation is required to provide essential service, prevent risk of injury to personnel or severe damage to equipment":
  - i. This authorization only allows such continued operation as necessary to provide essential service, prevent risk of 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 repair the affected process or remove the affected process from service so that excess emissions cease. Unless the Permittee obtains an extension from the Illinois EPA, this shall be accomplished within 24 hours\* or noon of the Illinois EPA's next business day\*, whichever is later. The Permittee may obtain an extension for up to a total of 72 hours\* from the Illinois EPA, Air Regional

Office unless extraordinary circumstances exist. The Illinois EPA, Air Compliance Section, in Springfield, may grant a longer extension if the Permittee demonstrates that unusual circumstances exist, the affected process can not reasonably be repaired or removed from service within the allowed time, the affected process can not be repaired or removed from service as soon as practicable; and the Permittee is taking reasonable steps to minimize excess emissions, based on the actions that have been and will be taken.

\* For this purpose and other related provisions, 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 affected process out of service.

- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.4.9(h) and 7.4.10(b).
- 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.

#### 7.4.4 Applicable Emission Standards

- a. The affected processes 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 processes, pursuant to 35 IAC 212.301.
- b. The affected processes shall comply with the standard in Condition 5.2.2(b), which addresses the opacity of the emission of smoke or other particulate matter from the affected processes, pursuant to 35 IAC 212.123.
- c. The affected processes are subject to 35 IAC 212.322(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 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 (see also Attachment 2) [35 IAC 212.322(a)].

7.4.5 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected processes not being subject to the requirements of 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the individual affected process does not meet the criteria of 40 CFR 64.2(a), i.e., the potential pre-control device emissions of particulate matter from each affected process do not equal or exceed major source threshold levels.

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, that minimize visible emissions of particulate matter and provide a reasonable assurance of compliance with the applicable emission standards in Conditions 7.4.4 and 7.4.6(b), pursuant to Section 39.5(7) (a) of the Act.
  - ii. The Permittee shall operate and maintain each affected process with the control measures identified in Condition 7.4.9(b).
- b.
  - i. PM emissions from the affected processes shall not exceed 2.3 tons per year[T1].
  - iii. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].
  - iv. The above limitations were established in Permit 98100067 [T1].

7.4.7 Testing Requirements

None

7.4.8 Inspection Requirements

The Permittee shall perform inspections of the affected processes on at least a monthly basis, including associated control measures, while the affected processes are in use, to confirm compliance with the requirements of Condition 7.4.6(a). These inspections may be scheduled so that only a number of affected operations are reviewed

during each inspection, provided however, that all affected processes shall be inspected at least once during each calendar quarter, pursuant to Section 39.5(7) (a) of the Act.

#### 7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected processes, pursuant to Section 39.5(7) (b) of the Act:

- a. The Permittee shall keep a record, which shall be kept up to date, of the maximum operating capacity of the affected processes.
- b.
  - i. The Permittee shall maintain a record, which shall be kept up to date, of the control measures of the affected processes currently being implemented pursuant to Condition 7.4.6(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 practices 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 (see also Condition 7.4.12).
- c. The Permittee shall maintain records of the following for the inspections required by Condition 7.4.8, for each affected process:
  - i. Date and time the inspection was performed and name(s) of inspection personnel.
  - ii. Area or specific operations inspected.
  - iii. The observed condition of the established control measures for the inspected area or operations.
  - iv. 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.

- v. A summary of compliance compared to the established control measures.
- 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 coal processed during the incident.
  - vi. A discussion of the probable cause of the incident and any preventative measures taken.
  - vii. A discussion whether Condition 7.4.4(b) may have been violated during the incident, with supporting explanation as needed.
- e. The Permittee shall keep a maintenance and repair log for each item of air pollution control equipment, i.e., each dust suppressant application system and each dust collection device, associated with affected process(es). This log shall list the date and nature of maintenance and repair activities performed on the item of equipment. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

f. To demonstrate compliance with Condition 7.4.6(b), the Permittee shall keep records for PM emissions of the affected processes (tons/month and tons/year), with supporting calculations.

h. Records for Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263, the Permittee shall maintain records, related to malfunction and breakdown for an affected process that as a minimum, shall include:

- i. A maintenance and repair log for each affected process and associated equipment, listing activities performed with date.
- ii. Records for each incident when operation of an affected process continued during malfunction or breakdown with excess emissions, as provided by Condition 7.4.3(b), including the following information:
  - A. Date and duration of malfunction or breakdown.
  - B. A description of the malfunction or breakdown.
  - C. The corrective actions used to reduce the quantity of emissions and the duration of the incident.
  - D. Confirmation of fulfillment of the requirements of Condition 7.4.10(b), as applicable, including copies of follow-up reports submitted pursuant to Condition 7.4.10(b) (ii).
  - E. If excess emissions occurred for two or more hours:
    - I. An explanation why continued operation of the affected process was necessary.
    - II. The preventative measures planned or taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
    - III. An estimate of the magnitude of excess emissions occurring during the incident.

#### 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. Notification within 30 days for operation of an affected processes that was not in compliance with applicable requirements in Conditions 7.4.6(b) 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).
- ii. Notification with the quarterly reports required by Condition 7.1.10(a) for other deviations, including deviations from applicable emission standards, inspection requirements and recordkeeping requirements.

b. Reporting of Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263, 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 process continued during malfunction or breakdown with excess emissions as addressed by Condition 7.4.3(b).

- i. The Permittee shall notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) as soon as possible during normal working hours for each incident in which the opacity from an affected process exceeds 30 percent for more than five consecutive 6-minute averaging periods. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds 30 percent for less than five consecutive 6-minute averaging periods in a row, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.4.10(a) (ii).
- ii. Upon conclusion of each incident that is two hours or more in duration, 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 of an affected process 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.

#### 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. 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.

#### 7.4.12 Compliance Procedures

- a. Compliance with Conditions 7.4.4(a) and (b) is addressed by the control, inspection, and recordkeeping required by Conditions 7.4.6(a), 7.4.8, and 7.4.9, respectively.
- b. Compliance with Conditions 7.4.4(c) and 7.4.6(b) is determined based on the control, inspection, and recordkeeping required by Conditions 7.4.6(a), 7.4.8, and 7.4.9, respectively, and published emission factors for uncontrolled PM emissions, efficiency of control measures, and controlled PM emissions as identified in the records required by Condition 7.4.9(b) or by the use of measured emissions factors.

7.5 Natural Gas and/or distillate fuel oil Fired Boilers

7.5.1 Description

The Permittee operates natural gas and/or distillate fuel oil fired boilers for electric generation and for building heating purposes when boilers 4 & 5 are not in operation. The boilers, which were built in the late 1940's, have nominal capacity of 50 MW each and served by a single stack. These boilers also have the capability to fire at various modes such as combination of natural gas and/or #2 fuel oil as their principle fuel.

7.5.2 List of Emission Units and Air Pollution Control Equipment

These unit-specific conditions address the following emission units:

Boiler ID	Description	Emission Control Equipment	Stack ID
Boiler B1	Combustion Engineering (Model #CE 8247), Field Constructed in 1948, Nominal Rating 50 MW	None	S1
Boiler B2	Combustion Engineering (Model #CE 8247), Field Constructed in 1948, Nominal Rating 50 MW	None	S1
Boiler B3	Combustion Engineering (Model #CE 8247), Field Constructed in 1948, Nominal Rating 50 MW	None	S1

7.5.3 Applicability Provisions

a. An "affected boiler" for the purpose of these unit-specific conditions, is an individual boiler that has a capacity in excess of 250 mmBtu/hr that has the capability of firing natural gas and/or distillate fuel oil, for which construction commenced prior to August 17, 1971, as described in Conditions 7.5.1 and 7.5.2.

b. Startup Provisions

The Permittee is authorized to operate an affected boiler in violation of the applicable standards in Condition 5.2.2(b) (35 IAC 212.123), Condition 7.5.4(c) (35 IAC 216.121), and Condition 7.5.4(d) (35 IAC 217.141(b)) during startup subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262, as the Permittee "... has affirmatively demonstrated that all reasonable efforts have been made to minimize startup emissions, duration of individual startups and frequency of startups.":

- i. This authorization only extends for a period of up to 10 hours following initial firing of fuel for each startup event.
  - ii. The Permittee shall conduct startup of an affected boiler in accordance with the manufacturers' written instructions or other written instructions maintained on site that are specifically developed to minimize excess emissions from startups and that include, at a minimum, the following measures:
    - A. Review of the operational condition of an affected boiler prior to initiating startup of the boiler.
    - B. Use of natural gas and/or #2 fuel oil burners as needed to heat the boiler.
    - C. Review of the operating parameters of an affected boiler during each startup as necessary to make appropriate adjustments to the startup to reduce or eliminate excess emissions.
  - iii. The Permittee shall fulfill applicable recordkeeping requirements of Condition 7.5.9(h).
- c. Malfunction and Breakdown Provisions

The Permittee is authorized to continue operation of an affected boiler in violation of the applicable requirements of Condition 5.2.2(b) (35 IAC 212.123), Condition 7.5.4(c) (35 IAC 216.121), and Condition 7.5.4(d) (35 IAC 217.141(b)) in the event of a malfunction or breakdown of an affected boiler subject to the following provisions. This authorization is provided pursuant to 35 IAC 201.262 as the Permittee has submitted "... proof that continued operation is required to provide essential service, prevent risk of injury to personnel or severe damage to equipment.":

- i. This authorization only allows such continued operation as necessary to provide essential service or prevent risk of injury to personnel or severe damage to equipment, which in case shall exceed for a period of up to 6 hours for each malfunction and breakdown event 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, or remove the affected

boiler from service so that excess emissions cease.

- iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Condition 7.5.9(i) and 7.5.10(b).
- 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.

#### 7.5.4 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 attributable to burning oil (liquid fuel) shall not exceed 0.10 lb/mmBtu of actual heat input, pursuant to 35 IAC 212.206 and 212.207.
- c. The emissions of SO<sub>2</sub> from each affected boiler shall not exceed 0.3 lb/mmBtu of actual heat input, from any fuel combustion emission unit burning liquid fuel exclusively pursuant to 35 IAC 214.161 or the emission limits calculated as specified in 35 IAC 214.162 when burning any combination of gaseous and liquid fuel in the affected boilers.
- d. The affected boilers are subject to 35 IAC 216.121 which provides that no person shall cause or allow the emission of CO into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air.
- e. The emissions of NO<sub>x</sub> from each affected boiler shall not exceed 0.3 lb/mmBtu of actual heat input, pursuant to 35 IAC 217.141(a) or the emission limits calculated as specified in 35 IAC 214.141(c) when burning any combination of gaseous and liquid fuel in the affected boilers. The affected boilers are subject to a more stringent NO<sub>x</sub> emission standard pursuant to Section 407 of the Clean Air Act and 40 CFR Part 76, as addressed in Condition 6.2.2 and Attachment 5 of this permit.
- f. i. During each ozone control period (May 1 through September 30):
  - A. The emissions of NO<sub>x</sub> from an affected boiler 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).

- B. The emissions of NO<sub>x</sub> from an affected boiler and other eligible EGU that are participating in a NO<sub>x</sub> averaging demonstration with an affected boiler as provided for by 35 IAC 217.708, shall not exceed 0.25 lbs/mmBtu of actual heat input, as averaged for the ozone control period for these EGU, pursuant to 35 IAC 217.708(a) and (b). For this purpose, other eligible EGU include: (1) other affected boilers, (2) other EGU owned and operated by the Permittee at its plants in Hennepin, Havana, Vermillion, and Baldwin (ID 155010AAA, 125804AAB, 183814AAA, and 157851AAA, respectively), which are also authorized by this permit to participate in a NO<sub>x</sub> averaging demonstration, and (3) 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 to the owner or operator of those EGU.
- 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 7.5.4(f) (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: 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.

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

- a. This permit is issued based on the affected boilers not being subject to the following New Source Performance Standards (NSPS) for steam generators because the affected boilers commenced construction before August 17, 1971 and have not been modified thereafter, based on the NSPS definition of modification:
  - i. NSPS for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971, 40 CFR 60 Subpart D.
  - ii. NSPS for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, 40 CFR 60 Subpart Da.
- b. This permit is issued based on the affected boilers not being subject to the following Illinois rules for new fuel combustion emission units, because each affected boiler was constructed prior to April 14, 1972 and have not been modified thereafter:
  - i. 35 IAC 212.122, Visible Emissions Limitations for Certain Emission Units for Which Construction or Modification Commenced on or After April 14, 1972.
  - ii. 35 IAC 212.204, Emission Units For Which Construction or Modification Commenced On or After April 14, 1972.
  - iii. 35 IAC 214.121, Large New Fuel Combustion Emission Sources.
  - iv. 35 IAC 217.121, New Fuel Combustion Emission Sources.
- c. This permit is issued based on, the affected boilers are not being subject requirements that apply to firing residual oil, because residual oil is not fired in the affected boilers. In this regard, the affected boilers are considered diesel fuel fired units, as defined by 40 CFR 72.2, under the Acid Rain Program.

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

- a. Natural gas and/or distillate fuel oil shall only be the fuel fired in the affected boilers.

#### 7.5.7 Testing Requirements

Pursuant to Section 39.5(7)(d)(ii) of the Act, the Permittee shall measure the PM and CO emissions of each affected boiler as specified below:

- a. i. PM emission measurements shall be made under the following circumstances:
  - A. Within 180 days of a written request from the Illinois or such later date set by the Illinois EPA if such time is reasonably needed to schedule and perform testing or coordinate testing with seasonal conditions.
- ii. Measurements of CO emissions shall be made as follows:
  - A. In conjunction with the next emission testing or relative accuracy testing for SO<sub>2</sub> or NO<sub>x</sub>, each subsequent if not otherwise performed earlier.
  - B. In conjunction with testing for SO<sub>2</sub> or NO<sub>x</sub> unless the previous CO measurement is no more than 100 ppm at 50 percent excess air, in which case CO measurements need not accompany the next measurements following the measurement in which CO emissions were shown to be no more than 100 ppm.
  - C. Within 180 days of a written request from the Illinois or such later date set by the Illinois EPA if such time is reasonably needed to schedule and perform testing or coordinate testing with seasonal conditions.
- 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 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 operations of the affect boilers differ 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 7.5.7(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 Method 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 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 283.230.
  - 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 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. Control equipment information, i.e., equipment condition and operating parameters during testing.
    - D. 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 opacity data (6-minute averages) measured during testing.

#### 7.5.8 Monitoring Requirements

- a. Pursuant to Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of SO<sub>2</sub> from the affected boilers which shall be used to demonstrate compliance with the limits in Condition 7.5.4(c) based on the average hourly SO<sub>2</sub> emission rate determined from monitored data from three-hour block averaging periods. This

monitoring equipment shall be operated pursuant to written monitoring procedures that include a quality assurance/control plan, which procedures address the requirements in 40 CFR Part 75.

- b. Pursuant to 35 IAC 217.710(a), the Permittee, shall install, calibrate, maintain and operate continuous emissions monitoring systems (CEMS) for the measurements of NO<sub>x</sub> from the affected boilers, in accordance with the requirements of 40 CFR 75 Subpart B.
- c. Pursuant to Sections 412 and 821 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)

#### 7.5.9 Recordkeeping Requirements

##### a. Records for Boiler Operation

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

- i. Load (in terms of either gross megawatts output or steam flow) on an hourly basis for each affected boiler.
- ii. For each shipment of fuel oil received, records of the quantity and the maximum sulfur content;
- iii. Records of the sulfur content of the fuel oil supply to the affected boilers, based on the weighted average of material in the storage tank, or the sulfur content of the supply shall be assumed to be the highest sulfur content in any shipment in the tank;
- iv. Total natural gas usage (million scf/month and million scf/yr) for each affected boiler.
- v. Combined total natural gas usage (million scf/month and million scf/yr) for all affected boilers.
- vi. Total fuel oil usage for each affected boilers, (gallons/month and gallons/year)

- vii. Combined total usage of fuel oil for all affected boilers (gallons/month and gallons/yr)
- viii. Heat content of the fuel oil fired in the affected boiler (Btu/gal);
- ix. Total operating hours (hours/quarter) for each affected boiler
- x. If the Permittee is relying on data for heat input for purposes of compliance with Condition 7.5.4(b) (35 IAC Part 212 Subpart E) that is different from that recorded pursuant to the federal Acid Rain Program, heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load as recorded pursuant to Condition 7.5.9(a) (i) to hourly heat input.

c. Records for Continuous Opacity Monitoring Systems

Pursuant to 35 IAC 201.407 and Section 39.5(7) (b) of the Act, the Permittee shall maintain records for the opacity monitoring system on the affected boilers required by Condition 7.5.8(a) that as 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 7.5.10(a) and (e).
- ii. Records for each affected boiler that identify the upper bound of the normal range of opacity measurements from the boilers, considering an hour of operation, within which compliance with Condition 7.5.4(b) is assured, with supporting explanation and documentation. At a minimum, these records shall be reviewed and revised as

necessary following performance of additional PM emission tests on an affected boiler.

- iii. Records to indicate compliance with Conditions 5.2.2(b), 7.5.4(a) and 7.5.4(b), including:
  - A. Each 6-minute period when the opacity was above the limitation of Conditions 5.2.2(b) and 7.5.4(a) (30 percent opacity) with date, time, whether it occurred during startup, malfunction/breakdown, or shutdown, and further explanation of the incident.
  - B. Each hour when the measured opacity of an affected boiler was above the normal range, as specified above in Condition 7.5.9(c) (ii), 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 7.5.4(b), with explanation.
- d. Records for Continuous SO<sub>2</sub> Monitoring Systems

Pursuant to Section 39.5(7) (b) of the Act, the Permittee shall maintain records for the SO<sub>2</sub> monitoring system on the affected boilers required by Condition 7.5.8(b) that as a minimum shall include:

  - i. Operating records for each SO<sub>2</sub> monitoring system, 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 an SO<sub>2</sub> monitor for a stack was inoperative, with date, time and reason.
    - G. Data reduction information used pursuant to Condition 7.5.12(c).
    - H. Quarterly reports submitted in accordance with Condition 7.5.10(a) (i) (F).

ii. Records to verify compliance with the limitation of Condition 7.5.4(c), including:

A. SO<sub>2</sub> emissions (lb/hour) from the affected boiler on an hourly basis, as derived from the data obtained by the SO<sub>2</sub> monitoring equipment.

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

The Permittee shall maintain records for the NO<sub>x</sub> monitoring system on the affected boilers required by Condition 7.5.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, pursuant to 35 IAC 217.712(a), as a minimum shall include:

i. Operating records for each NO<sub>x</sub> monitoring system, 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 a NO<sub>x</sub> monitor for a stack was inoperative, with date, time and reason.

G. Data reduction information used pursuant to Condition 7.5.12(e).

H. Quarterly reports submitted in accordance with Condition 7.5.10(a) (i) (F).

ii. The Permittee shall maintain records for the NO<sub>x</sub> monitoring system on the affected boilers required by Condition 7.5.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, pursuant to 35 IAC 217.712(a).

g. Acid Rain Program

Records for the continuous emission monitoring required for 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 6.2.3]

h. Records for Startups

Pursuant to Section 39.5(7)(b) of the Act, the Permittee shall maintain records, related to startup of each affected boiler that at a minimum shall include the following:

- i. Records of the source's established startup procedures for each affected boiler (as summarized in the CAAPP application).
- ii. Records for each startup of an affected boiler that may result in excess opacity or PM emissions, including:
  - A. Date and description of startup, e.g., startup following scheduled maintenance outage.
  - B. Duration of the startup, from initial firing of fuel to achievement of normal operation, i.e., stable operation firing the principal fuel with control equipment operating to enable compliance.
  - C. If normal operation is not achieved within 4 hours or if established startup procedures are not followed:
    - I. An explanation why startup could not be completed sooner or established procedures could not be followed.
    - II. Documentation for the established startup procedures that were followed.
    - III. The time at which fuel firing was begun.
    - IV. Estimates of magnitude of PM emitted in excess of the applicable PM standard during startup.
- i. Records for Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263, the Permittee shall maintain records, related to malfunction and breakdown for each affected boiler that as a minimum, shall include:

- i. A maintenance and repair log for each affected boiler and associated equipment, listing activities performed with date.

- ii. Records for each incident when operation of an affected boiler continued during malfunction or breakdown with excess emissions, as provided by Condition 7.5.3(c), including the following information:
  - A. Date and duration of malfunction or breakdown.
  - B. A description of the malfunction or breakdown.
  - C. The corrective actions used to reduce the quantity of emissions and the duration of the incident.
  - D. Confirmation of fulfillment of the requirements of Condition 7.5.10(b), as applicable, including copies of follow-up reports submitted pursuant to Condition 7.5.10(b) (ii).
  - E. If excess emissions occurred for two or more hours:
    - I. An explanation why continued operation of the affected boiler was necessary.
    - II. The preventative measures planned or taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity.
    - III. An estimate of the magnitude of excess emissions occurring during the incident.

#### 7.5.10 Reporting Requirements

##### a. Quarterly Operating Report

In place of the semi-annual reports required by General Permit Condition 8.6.1, the Permittee shall provide a quarterly operating report to the Illinois EPA pursuant to Section 39.5(7) (b) of the Act.

- i. This report shall include the following information for operation 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.
  - D. The number of startups for each affected boiler.
  - E. A summary of the records required by Condition 7.5.9(i)(ii) for incidents when operation of an affected boiler continued during malfunction or breakdown with excess emissions that are not addressed by individual reports submitted pursuant to Condition 7.5.10(b)(ii). (See also notification and reporting requirements for individual incidents in Condition 7.5.10(b).)
  - F. The information related to SO<sub>2</sub> and NO<sub>x</sub> emissions during the quarter specified by Condition 7.5.10(c) and 7.5.10(d).
  - G. The information related to opacity and particulate matter emissions during the quarter specified by Condition 7.5.10(e).
  - H. A summary of other noncompliance as separately reported pursuant to Condition 7.5.10(g)(ii).
- ii. This report shall be submitted promptly 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. Reporting of Continued Operation During Malfunctions And Breakdowns

Pursuant to 35 IAC 201.263, 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 continued during malfunction or breakdown with excess emissions as addressed by Condition 7.5.3(c). These requirements do not apply to such excess emissions, if any, that occur during shutdown of the affected boiler.

- i. The Permittee shall notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) as soon as possible during normal

working hours for each incident in which the opacity from an affected boiler exceeds 30 percent for more than five consecutive 6-minute averaging periods unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds 30 percent for less than six 6-minute averaging periods in a row, the Permittee need only report the incident in the quarterly report, in accordance with Condition 7.5.10(a)(i)(E).)

- ii. Upon conclusion of each incident that is two hours or more in duration, 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 of an affected boiler 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 boiler was taken out of service.

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

Pursuant to Sections 39.5(7)(f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly operating reports pursuant to Condition 7.5.10(a):

- i. Summary information on the performance of each SO<sub>2</sub> monitoring system, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the continuous SO<sub>2</sub> monitoring system 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 monitoring system 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 monitoring system was inoperative except for zero and span checks, and the nature of system 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 system 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 limitation in Condition 7.5.4(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 7.5.9(d) (ii).
  - D. The cause of the excess emissions, if known.
  - E. 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 7.5.4(c) The records for excess emissions shall consist of a three-hour block emission averages during which the limitation was exceeded.

d. Reporting of NOx Emissions

Pursuant to Sections 39.5(7)(f) of the Act, the Permittee shall report the following information for the affected boilers to the Illinois EPA with its quarterly operating reports pursuant to Condition 7.5.10(a):

- i. Summary information on the performance of each NOx monitoring system, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the continuous NOx monitoring system 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 monitoring system 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 monitoring system was inoperative except for zero and span checks, and the nature of system 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 system was out-of-control as addressed by 40 CFR 75.24.

- iii. The following information for each period when NOx emissions were in excess of the limitation in Condition 7.5.4(e)\*. When there were no such exceedances, this shall be stated in the report.:
  - A. The starting date and time of the NOx excess emissions.
  - B. The duration of the excess emissions.
  - C. A copy of the records for the excess emissions, as maintained pursuant to Condition 7.5.9(e) (ii).
  - D. The cause of the excess emissions, if known.
  - E. Corrective actions and actions taken to lessen the emissions.

\* - For NOx emissions, the averaging period is a three-hour block average, as used to determine compliance with the limitations of Condition 7.5.4(e). The records for excess emissions shall consist of a three-hour block emission averages during which the limitation was exceeded.

e. Reporting of Opacity and Particulate Matter Emissions

Pursuant to 35 IAC 201.405 and 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 operating report pursuant to Condition 7.5.10(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 limitations in Conditions 5.2.2(b) and 7.5.4(a):
  - A. The starting dates and time of the excess opacity.
  - B. The duration of the excess opacity.
  - C. The magnitude of excess opacity, based on six minute average opacity, including:
    - I. The percent opacity for each 6 minute increment.
    - II. The start and stop time of each six minute increment in excess of the limitation.
  - D. The cause of the excess opacity, if known, including which boiler(s) were contributing to excess opacity and whether such excess emissions occurred during startup or malfunction/breakdown of the boiler.
  - E. Corrective actions and actions taken to lessen the emissions.
- iv. The following information for each period when particulate matter emissions were in excess of the limitation in Condition 7.5.4(b). If there were no such exceedances during the reporting period, the quarterly report shall so state.
  - A. The starting dates and time of the excess emissions.
  - B. The duration of the excess emissions.
  - C. The magnitude of excess emissions.
  - D. The information or means by which excess emissions were indicated or identified.
  - E. The cause of the excess emissions, if known, including which affected boiler(s) were contributing to excess emissions and whether such excess emissions occurred during startup or malfunction/breakdown of the affected boiler(s).
  - F. Corrective actions and actions taken to lessen the emissions.
- f. The Permittee shall submit a report by November 30 of each year, to the Illinois EPA that demonstrates that

each affected boiler has complied with Condition 7.5.4(f). These reports shall be accompanied by a certification statement signed by a responsible official for the Permittee as specified by 35 IAC 217.712(c), pursuant to 35 IAC 217.712(c), (d), and (e).

- i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.5.4(f)(i)(A), this report shall contain the information specified by 35 IAC 217.712(d) including the heat input and NOx emissions of the unit for the ozone control period.
- ii. If the Permittee is demonstrating compliance by means of "NOx averaging" as authorized by Condition 7.5.4(f)(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 NOx averaging demonstration, the Permittee shall report the following:
    - I. Identification of the other EGU that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.5.10(f)(ii)(B) below.
    - II. A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)] and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).
    - III. The average NOx 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 NOx emissions of the unit for the ozone control period.

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

B. If the Permittee is the lead party for a NOx averaging demonstration, the Permittee shall report the following:

I. Copies of the information submitted by other parties for the EGU participating in the demonstration, which include all material required by Condition 7.5.10(f)(ii)(A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).

II. The averaged NOx emission rate for all EGU participating in the demonstration, with complete supporting calculations, as required by 35 IAC 217.712(e)(1).

III. A statement whether the demonstration shows compliance.

g. Prompt Reporting of Deviations

For the affected boiler, 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. Reporting as specified above in Conditions 7.5.10(b), (c), (d), and (e) for deviations from Conditions 5.2.2(b) and 7.5.4.

ii. Notification within 30 days for a deviation from Condition 7.5.6, if any, with a copy of applicable records for such incident or description of the incident and a discussion of the probable cause of such deviation, the corrective actions taken, and the preventative measures taken.

iii. Reporting of deviations with the quarterly reports required by Condition 7.1.10(a) for deviations from other applicable requirements, e.g., monitoring and recordkeeping requirements. For this purpose, these reports shall include a description of each incident, a discussion of the probable cause of the deviation, the

corrective actions taken, and the preventative measures taken.

h. Acid Rain Program Reporting

Pursuant to Sections 412 and 821 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.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to each affected boiler without prior notification to the Illinois EPA or revision of this permit. 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 air pollution control equipment, which is addressed by a separate construction permit.

7.5.12 Compliance Procedures

- a. i. Compliance with the opacity limitation of Conditions 5.2.2(b) and 7.5.4(a) (30 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 7.5.8(a) and the recordkeeping requirements of Conditions 7.5.9(c).
- ii. Notwithstanding Condition 7.5.12(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 affected boiler 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.

- B. Have the capability to review such short-term opacity data to identify:
    - I. For each affected boiler, any hour in which opacity, exceeded 30 percent, and then, in such hour the duration of opacity in excess of 30 percent; whether opacity ever exceeded 60 percent; and whether the duration of opacity in excess of 30 percent was more than 8 minutes in aggregate.
    - II. For each affected boiler, whether opacity in excess of 30 percent occurred in more than three hours in a 24 hour period.
    - III. For each affected boiler, whether opacity exceeded 30 percent for more than an hour.
  - C. In the reports required by Condition 7.5.10(e), 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 an affected boiler did not violate Conditions 5.2.2(b) and 7.5.4(a) even though opacity on a 6-minute average exceeded 30 percent.
  - D. 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 limitation of Condition 7.5.4(b) is addressed by continuous opacity monitoring in accordance with Condition 7.5.8(a), PM testing in accordance with Condition 7.5.7, and the recordkeeping required by Conditions 7.5.9(c).
  - c. Compliance with the SO<sub>2</sub> emission limitation of Condition 7.5.4(c) is addressed by continuous emission monitoring in accordance with Condition 7.5.8(b) and the recordkeeping required by Condition 7.5.9(d).

- d. Compliance with the CO emission limitation of Condition 7.5.4(d) is addressed by emission testing in accordance with Condition 7.5.7. Further compliance procedures are not set by this permit as compliance is assumed to be inherent in operation of an affected boiler under operating conditions other than startup or shutdown.
- e. Compliance with NOx emission limitations of Conditions 7.5.4(e) and 7.5.4(f) is addressed by the recordkeeping required by Condition 7.5.9(e).

7.6 Storage Tanks

7.6.1 Description

The Permittee stores gasoline used for onsite use

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
S1	500 Gallon Gasoline Storage Tank	Submerged Loading Pipe

7.6.3 Applicability Provisions

An "affected storage tank" for the purpose of these unit-specific conditions, is the storage tank described in Conditions 7.6.1 and 7.6.2.

7.6.4 Applicable Emission Standards

- a. 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)].
- ii. Exception: If no odor nuisance exists the limitations of Condition 7.6.4(a) shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) [35 IAC 215.122(c)].
- b. 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)].

7.6.5 Non-Applicability of Regulations of Concern

- a. This permit is issued based on each affected storage tank not being subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), 40 CFR Part 60, Subpart Kb, because each affected storage tank is less than 40 cubic meters (10,566 gallons).

- b. This permit is issued based on each affected storage tank not being subject to 35 IAC 215.121, because each affected storage tank is less than 40,000 gallons.
- c. This permit is issued based on each affected storage tank not being subject to 35 IAC 215.122(a), because each affected storage tank is less than 40,000 gallons.
- d. The requirements of 35 IAC 215.583(a)(2) shall not apply to transfers of gasoline to a stationary storage tank at a gasoline dispensing facility because the affected storage tanks are not located in any of the following counties: Boone, Cook, DuPage, Kane, Lake, Madison, McHenry, Peoria, Rock Island, St. Clair, Tazewell, Will or Winnebago [35 IAC 215.583(b)].
- e. This permit is issued based on each affected storage tank not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because each affected storage tank does not use an add-on control device to achieve compliance with an emission limitation or standard.

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

None

7.6.7 Testing Requirements

None

7.6.8 Inspection Requirements

None

7.6.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected storage tanks, pursuant to Section 39.5(7)(b) of the Act:

- a. Design information for the affected storage tanks showing the presence of permanent submerged loading pipe or the use of submerged loading fill when loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F) or loading of gasoline.
- b. Maintenance and repair records for the affected storage tanks, as related to the repair or replacement of the loading pipe.
- c. Identification and throughput of each material stored in the affected storage tanks, gal/mo and gal/yr.

#### 7.6.10 Reporting Requirements

For the affected storage tanks, 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. Any storage of VOL in the affected storage tanks that are not in compliance with the requirements of Conditions 7.6.4(a) or 7.6.4(b) within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps taken to avoid future non-compliance.

#### 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 storage tanks without prior notification to the Illinois EPA or revision of this permit. 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. Changes to components related to either the submerged loading pipe or submerged fill, including addition of new components and repair and replacement of components.
- b. Changes in the material stored in the affected storage tanks, provided the affected storage tanks continue to comply with the Conditions of Section 7.6 of this permit.

#### 7.6.12 Compliance Procedures

- a. Compliance with Conditions 7.6.4(a) and 7.6.4(b) is considered to be assured by the use of submerged loading pipe or submerged fill as required in Condition 7.6.6(a) and by the recordkeeping requirement of Condition 7.6.9.

## 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.

This permit shield does not extend to applicable requirements which are promulgated after \_\_\_\_\_ **{insert public notice start date}** (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

### 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 5.2. 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].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

### 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. 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 Condition 8.6.

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [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 determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which 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. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
  - i. Illinois EPA - Air Compliance Section  
Illinois Environmental Protection Agency (MC 40)  
Bureau of Air  
Compliance Section  
P.O. Box 19276  
Springfield, Illinois 62794-9276
  - ii. Illinois EPA - Air Regional Field Office  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
2009 Mall Street  
Collinsville, Illinois 62234
  - iii. Illinois EPA - Air Permit Section (MC 11)  
Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section  
P.O. Box 19506  
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)  
Air & Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

## 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 or noncompliance with applicable requirements.

### 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 such malfunction or breakdown is allowed by a permit condition [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.

#### 9.2.5 Duty to Pay Fees

The Permittee must 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]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

### 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 [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- 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 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

#### 9.5 Liability

##### 9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

##### 9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

##### 9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

##### 9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

##### 9.5.5 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 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.

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 the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- 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 logs, 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. Normally, an act of God such as lightning or flood is considered an emergency;
  - 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, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, 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 inaccurate statement when 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 to ensure compliance with the applicable requirements of the Act.

##### 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 under Section 39.5(15)(b) 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, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. 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

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) 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, 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)

217-782-2113

**ACID RAIN PROGRAM  
PHASE II PERMIT - REVISED**

Dynegy Midwest Generation, Inc.  
 Attn: Mr. Aric D. Diericx, Designated Representative  
 2828 North Monroe Street  
 Decatur, Illinois 62526-3269

Oris No.: 898  
IEPA I.D. No.: 119020AAE  
Source/Unit: Wood River 4 - 5  
Date Received: May 13, 2002  
Date Issued: January 29, 2003  
Effective Date: January 1, 2000  
Expiration Date: December 31, 2004

**STATEMENT OF BASIS:**

In accordance with Section 39.5(17)(b), Title IV; Acid Rain Provisions, of the Illinois Environmental Protection Act [415 ILCS 5/1 et Seq.] and Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is revising this Acid Rain Program Phase II permit for the Dynegy Midwest Generation, Inc. Wood River plant to incorporate nitrogen oxides emission limitation compliance plan requirement.

**SULFUR DIOXIDE (SO<sub>2</sub>) ALLOCATIONS AND NITROGEN OXIDES (NO<sub>x</sub>) REQUIREMENTS FOR EACH AFFECTED UNIT:**

		2000	2001	2002	2003	2004
UNIT 4	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	2,258	2,258	2,258	2,258	2,258

UNIT 4	NO <sub>x</sub> Limit	<p><u>2002</u></p> <p>Pursuant to 40 CRR Part 76, the Illinois EPA approves a NO<sub>x</sub> standard emission limitation compliance plan for Unit 4. The NO<sub>x</sub> compliance plan is effective beginning 2001 through 2004. Under the NO<sub>x</sub> compliance plan, this units annual average NO<sub>x</sub> emissions rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(2), of 0.45 lb/mmBtu.</p> <p><u>2003-2004</u></p> <p>Pursuant to 40 CFR 76.11, the Illinois EPA approves a NO<sub>x</sub> emissions averaging plan for this unit, that is effective for one calendar year for the years 2003 and 2004. Under this plan, except as provided below, this unit's NO<sub>x</sub> emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.40 lb/mmBtu and this unit shall not have an annual heat input greater than 6,000,000 mmBtu.</p> <p>Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for the units in the plan shall be less than or equal to the</p>				
--------	-----------------------	---	--	--	--	--

	Btu-weighted annual average NO <sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR
--	---

UNIT 4 Continued	<p>76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.</p> <p>In addition to the described NO<sub>x</sub> compliance plan, this 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.</p>
---------------------	--

		2000	2001	2002	2003	2004
UNIT 5	SO <sub>2</sub> Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	9,478	9,478	9,478	9,478	9,478

UNIT 5	NO <sub>x</sub> Limit	<p><u>2002</u></p> <p>Pursuant to 40 CRR Part 76, the Illinois EPA approves a NO<sub>x</sub> standard emission limitation compliance plan for Unit 5. The NO<sub>x</sub> compliance plan is effective beginning 2001 through 2004. Under the NO<sub>x</sub> compliance plan, this units annual average NO<sub>x</sub> emissions rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(2), of 0.45 lb/mmBtu.</p> <p><u>2003-2004</u></p> <p>Pursuant to 40 CFR 76.11, the Illinois EPA approves a NO<sub>x</sub> emissions averaging plan for this unit, that is effective for one calendar year for the years 2003 and 2004. Under this plan, except as provided below, this unit's NO<sub>x</sub> emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.40 lb/mmBtu and this unit shall not have an annual heat input greater than 20,000,000 mmBtu.</p> <p>Under the plan, the actual Btu-weighted annual average NO<sub>x</sub> emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO<sub>x</sub> emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.</p> <p>In addition to the described NO<sub>x</sub> compliance plan, this 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</p>
--------	-----------------------	---

		requirements covering excess emissions.
--	--	---

**COMMENTS, NOTES AND JUSTIFICATIONS:** The revised permit addresses a revised NO<sub>x</sub> compliance plan in which an alternate compliance emission limitation is chosen that is effective for calendar year 2002 through calendar year 2004.

**PERMIT APPLICATION:** The NO<sub>x</sub> compliance plan and instructions are 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.

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

(ORIGINAL SIGNED BY DONALD E. SUTTON)

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

DES:MA:jar

Attachment

cc: Cecilia Mijares, USEPA Region V  
John Justice, IEPA Region 3



# Phase II Permit Application

Page 1

For more information, see instructions and refer to 40 CFR 72.30 and 72.31

This submission is:  New  Revised

**STEP 1**  
Identify the source by plant name, State, and RIS code from NAAR

Plant Name	WOOD RIVER	State	IL	0898
				OMB Code

**STEP 2**  
Enter the boiler ID# from NAAR for each affected unit, and indicate whether a repowering plan is being submitted for the unit by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e

a	Compliance Plan		d	e
	b	c		
Boiler ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.30(d)(1)	Repowering Plan	New Units  Commence Operation Date	New Units  Monitor Certification Deadline
1	Yes	NO		
2	Yes	NO		
3	Yes	NO		
4	Yes	<del>YES</del> NO	} changed by ADR to NO	MUE 8/6/97
5	Yes	<del>YES</del> NO		
	Yes			

**STEP 3**  
Check the box if the response in column c Step 2 is "Yes" on any unit

For each unit that will be repowered, the Repowering Extension Plan form is included and the Repowering Technology Petition form has been submitted or will be submitted by June 1, 1997.

↑ changed to blank by ADR 8-6-97 MUE

**STEP 4**  
Read the standard requirements and certification, enter the name of the designated representative, and sign and date

**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 deadline 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 parts 74, 75, and 76.
- (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 parts 74 and 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristic of 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)) 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 unit 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)(i) 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 the written exemption under 40 CFR 72.7 and 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.

**Minimum Ozone 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;
  - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Plant Name (from Step 1) WOOD RIVER

Recordskeeping and Reporting Requirements (cont.)

- (10) 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.
- (11) 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 a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. 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 a written 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.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

JENE L. ROBINSON



12/27/95

STEP 5 (optional)  
Enter the source AIRS  
and FINS identification  
numbers, if known

--



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

For more information, see instructions and refer to 40 CFR 76.11

Page 1

This submission is:  New  Revised

Page 1 of 2

### STEP 1

Identify the units participating in this averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation (ACEL) in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 2 if necessary.

Plant Name	State	ID#	(a) Emission Limitation	(b) ACEL	(c) Annual Heat Input Limit
Hennepin	IL	1	0.40	0.40	4,000,000
Hennepin	IL	2	0.45	0.40	15,000,000
Vermilion	IL	1	0.45	0.50	5,000,000
Vermilion	IL	2	0.45	0.50	7,000,000

### STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

0.44

$$\frac{\sum_{i=1}^n (R_{L,i} \times HI_i)}{\sum_{i=1}^n HI_i}$$

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

0.44

$$\frac{\sum_{i=1}^n (R_{A,i} \times HI_i)}{\sum_{i=1}^n HI_i}$$

=

Where,

- R<sub>L,i</sub> = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1;
- R<sub>A,i</sub> = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;
- HI<sub>i</sub> = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;
- n = Number of units in the averaging plan

Hennepin  
Plant Name (from Step 1)

NO<sub>x</sub> Averaging - Page 2

**STEP 3**

Mark one of the two options and enter dates.

- This plan is effective for calendar year \_\_\_\_\_ through calendar year \_\_\_\_\_ unless notification to terminate the plan is given.
- Treat this plan as  chemical plans, each effective for one calendar year for the following calendar years: 2002, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ unless notification to terminate one or more of these plans is given.

**STEP 4**

Read the special provisions and certification, enter the name of the designated representative, and sign and date.

**Special Provisions**

Emission Limitations

Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO<sub>x</sub> under the plan only if the following requirements are met:

- (i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and
- (ii) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan.
- (j) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or
- (k) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(i)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.
- (l) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(i)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (j).

Liability

The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

Termination

The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name: Aric D. Djorick	
Signature: 	Date: October 28, 2002



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

For more information, see instructions and refer to 40 CFR 76.11

Page 1

The submission is:  New  Revised

Page  of

### STEP 1

Identify the units participating in one averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation (ACEL) in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

Plant Name	State	ID#	(a) Emission Limitation	(b) ACEL	(c) Annual Heat Input Limit
Baldwin	IL	1	0.86	0.86	45,000,000
Rakwin	IL	2	0.86	0.86	38,000,000
Hennepin	IL	1	0.40	0.40	4,000,000
Hennepin	IL	2	0.46	0.40	15,000,000
Vermilion	IL	1	0.45	0.50	5,000,000
Vermilion	IL	2	0.45	0.50	7,000,000
Wood River	IL	4	0.40	0.40	6,000,000
Wood River	IL	5	0.40	0.40	20,000,000
Baldwin	IL	3	0.45	0.45	45,000,000

### STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan

0.61

$$\frac{\sum_{i=1}^n (R_{i1} \times HI_i)}{\sum_{i=1}^n HI_i}$$

Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7

0.61

$$\frac{\sum_{i=1}^n [R_{i1} \times HI_i]}{\sum_{i=1}^n HI_i}$$

U

Where,

- R<sub>i1</sub> = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1;
- R<sub>i</sub> = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;
- HI<sub>i</sub> = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;
- n = Number of units in the averaging plan

Rainwin  
Plant Name (from Step 1)

NO, Averaging - Page 2

**STEP 3**

Mark one of the two options and enter dates.

- This plan is effective for calendar year \_\_\_\_\_ through calendar year \_\_\_\_\_ unless notification to terminate the plan is given.
- Treat this plan as  identical plans, each effective for one calendar year for the following calendar years: 2003, 2004, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ unless notification to terminate one or more of these plans is given.

**STEP 4**

Read the special provisions and certification, enter the name of the designated representative, and sign and date.

**Special Provisions**

Emission Limitations

Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO<sub>x</sub> under the plan only if the following requirements are met:

- (1) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and
- (a) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan,
- (b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or
- (c) If one or more of the units does not meet the requirements of (1), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(i)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.
- (ii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(iii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (1).

Liability

The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

Termination

The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

Certification

I am authorized to make the 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: <u>Eric D. Dierick</u>	
Signature: 	Date: <u>October 28, 2002</u>





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

For more information, see instructions and refer to 40 CFR 76.8

This submission is:  New  Revised

### STEP 1

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

Plant Name	Wood River	State	IL	ORIS Code	0898
------------	------------	-------	----	-----------	------

### STEP 2

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CR" for coal burner, "CY" for cyclone, "DRW" 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.

ID#	Type										
4	T	5	T								

(a) Standard annual average emission limitation of 0.66 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Standard annual average emission limitation of 0.66 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/97 (also indicate above emission limit specified in plan)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Standard annual average emission limitation of 0.44 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Standard annual average emission limitation of 0.44 lb/mmBtu (for Phase II tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Standard annual average emission limitation of 0.28 lb/mmBtu (for coal burner boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Standard annual average emission limitation of 0.28 lb/mmBtu (for cyclone boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Standard annual average emission limitation of 0.30 lb/mmBtu (for vertically fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Standard annual average emission limitation of 0.34 lb/mmBtu (for wet bottom boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) NO <sub>x</sub> Averaging Plan (include NO <sub>x</sub> Averaging Plan)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>							
(k) Common stack agreement to 40 CFR 76.17(a)(2)(ii)(A) (check the secondary emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Common stack pursuant to 40 CFR 75.17(a)(2)(ii)(B) with NO<sub>x</sub> Averaging Plan box and Violate NO<sub>x</sub> Averaging term

Plant Name (from Step 1) Wood River

NO<sub>x</sub> Compliance - Page 2  
Page 15 of 13

STEP 2, cont'd.

ID#	ID#	ID#	ID#	ID#	ID#
Type	Type	Type	Type	Type	Type

(m) EPA-approved common stack abatement method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(ii)(B), or (a)(2)(i)

(n) Alternative Emissions Limitation (includes Alternative Emissions Limitation Demonstration Period form or AEL renewal form)

STEP 3

Read the standard requirements and certification, enter the name of the designated representative, sign & date.

Standard Requirements

**General.** This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.6(a)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

**Mississippi Rules.** 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 76.6(a)(2) except as provided under 40 CFR 76.6(a)(3)(B).

**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 76.6 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for failing the obligations specified in 40 CFR Part 77.

**Termination.** An approved early election plan shall be in effect only until the earlier of January 1, 2006 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 76.6 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 2006 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name <u>Aric D. Dierick</u>	
Signature <u>Aric D. Dierick</u>	Date <u>12/19/97</u>