REVISED PROPOSED PERMIT
August 2005

217/782-2113

CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE

Southern Illinois Power Cooperative
Attn: Leonard Hopkins
11543 Lake of Egypt Road
Marion, Il 62959

Application No.: 95090124 I.D. No.: 199856AAC
Applicant's Designation: Marion Date Received: September 08, 1995
Operation of: Electrical Power Generation
Date Issued: Expiration Date[1]: "5 year duration"
Source Location: 10825 Lake of Egypt Road, Marion (Williamson County)
Responsible Official: Richard Myott/Environmental & Planning Dept. Manager

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

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

If you have any questions concerning this permit, please contact the Utility Unit at 217/782-2113 (217/782-9143 TDD).

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

cc: Illinois EPA, FOS, Region 3
USEPA

[1]Except as addressed by Condition 8.7 of this permit.

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1.0 INTRODUCTION

1.1 Source Identification

Southern Illinois Power Cooperative / Marion Generating Station
10825 Lake of Egypt Road
Marion, Il 62959
618/964-1448

I.D. No.: 199856AAC
Acid Rain Permit ORIS Code No.: 976

Standard Industrial Classification: 4911, Electrical Services

1.2 Owner/Parent Company

Southern Illinois Power Cooperative / Marion Generating Station
11543 Lake of Egypt Road
Marion, Il 62959

1.3 Operator

Southern Illinois Power Cooperative / Marion Generating Station
11543 Lake of Egypt Road
Marion, Il 62959

Leonard Hopkins/Environmental Superintendent
618/964-1448

1.4 General Source Description

The Marion Generating Station operates two coal-fired boilers and two peaking turbines to produce electricity.

1.5 Title I Conditions

This CAAPP permit contains certain conditions for units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM), and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of Illinois' Environmental Protection Act (Act). These "Title I conditions" within this permit are specifically designated as "T1," if they reflect requirements established in construction permits issued for this source, "T1R" if they revise requirements established in such construction permits, or "T1N" if they are newly established in this CAAPP permit. These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
EGU	electrical generating unit(s)
Gal	gallon
HAP	Hazardous Air Pollutant
Hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
Kw	Kilowatts
LAER	Lowest Achievable Emission Rate
Lb	pound
MACT	Maximum Achievable Control Technology
mmBtu	Million British thermal units
Mg	megagram or metric ton
MW	Megawatts
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOx	Nitrogen Oxides
NSPS	New Source Performance Standards
NSSA	new source set-aside
ORIS	Office of Regulatory Information System
PM	Particulate Matter
PM_{10}	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_2	Sulfur Dioxide
T	ton (2000 pounds)
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

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

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

Cold Cleaning

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:

Diesel Storage Tanks
Lube Oil Tank
Turbine Oil Tank
Acid Storage Tank
Anhydrous Ammonia Storage Tank

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

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

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

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)].

Coating operations (excluding powder, architectural and industrial maintenance coating) with aggregate VOM usage that never exceeds 15 lbs/day from all coating lines at the source, including VOM from coating,

diluents, and cleaning materials [35 IAC 201.210(a)(13)].

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

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

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182.

3.2.2 For each particulate matter process emission unit, other than the units excluded by 35 IAC 212.323 and 212. 681, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit’s process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.

3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Emission Control Equipment	Ref*
Boiler Unit 123	Circulating Fluidized Bed (CFB) Boiler	Limestone Injection, SNCR System and Baghouse	7.1
Boiler Unit 4	Babcock & Wilcox Coal Boiler Nominal 1,700 mmBtu/hr (1975)	SCR, ESP and Scrubber	7.2
Coal Handling Equipment	Coal Receiving, Transfer, and Storage Operations	Enclosure and Dust Suppressant Application System	7.3
Crusher House	Coal Crushing Operation	Enclosure and Dust Suppressant Application	7.4
Fly Ash Handling	Transfer Systems, Storage and Loadout Operations	Enclosure and Dust Collection Devices	7.5
Fly Ash Pug Mill	Fly Ash/Scrubber Sludge Mixing Operation	Moisture Content and Enclosure	
Limestone Handling & Processing	Receiving, Storage Transfer and Crushing Operations	Moisture Content and Enclosure	7.6
Turbine Unit 5	Natural Gas Fired Turbine Nominal 969 mmBtu/hr	Low NOx Combustion Systems, with Water Injection for Backup Oil Firing	7.7
Turbine Unit 6	Natural Gas Fired Turbine Nominal 969 mmBtu/hr		

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

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of SO_2, CO, NOx, VOM, PM and HAP emissions.

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

5.2 Applicable Regulations

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

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

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

b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

Note: As new fuel combustion emission units, constructed after April 14, 1972, with heat input capacity greater than 250 mmBTU/hr, the coal-fired boilers at this source are subject to 35 IAC 212.122, which sets a limit on opacity of 20 percent.

5.2.3 Ozone Depleting Substances

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

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the

standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be appropriately certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan (RMP)

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

a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

b. A certification statement that the source is in compliance with all applicable requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

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

5.2.5 Future Emission Standards

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

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

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

violation of applicable requirements prior to or at the time of permit issuance.

5.2.6 Episode Action Plan

a. Pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.

c. If an operational change occurs at the source that invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.

5.2.7 Compliance Assurance Monitoring (CAM) Plan

Pursuant to 40 CFR 64.5, if the Permittee submits a request for a significant revision of this permit that is applicable to an affected large pollutant-specific emissions unit, as defined by 40 CFR 64.1, 64.2 and 64.5(a), (e.g., a coal-fired boiler as it emits particulate matter), the Permittee shall submit as part of such application the information required under 40 CFR 64.4 for a CAM plan.

Note: As provided by 40 CFR 64.5(a)(1), the Permittee was not required to submit CAM plans for affected large pollutant-specific emissions units with the application for this permit because a complete CAAPP application was submitted before April 20, 1998. For all pollutant-specific emissions units that meet the criteria in 40 CFR 64.42(a), so as to be subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, the source must submit the information required under 40 CFR 64.4 as part of the application for renewal of this permit.

5.3 General Non-Applicability of Regulations of Concern

None

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

5.4 Source-Wide Operational and Production Limits and Work Practices

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

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

Emission limitations are not set for this source for the purpose of permit fees. Rather, the Permittee shall pay the maximum fee required pursuant to Section 39.5(18)(a)(ii)(A) of the Act, which is currently $250,000.00 per year. (See also Condition 9.4.)

5.6 General Recordkeeping Requirements

5.6.1 Records for Emissions

The Permittee shall maintain records for the source to prepare its Annual Emission Report including the following items, pursuant to Sections 4(b) and 39.5(7)(a), (b) and (e) of the Act:

a. Records of annual emissions from the emission units that are covered by Section 7 (Unit Specific Conditions) of this permit, including emissions of mercury, hydrogen chloride, and hydrogen fluoride.

b. i. For purposes of estimating mercury emissions from the source, the mercury content of coal burned in boilers may be based on the data collected by USEPA in its Information Collection Request (ICR) pursuant to Section 112 of the Clean Air Act.

ii. If ICR data or other reliable data for elemental composition, including mercury content, is not available for coal that is burned in a boiler, the Permittee shall collect representative data on the elemental composition of the coal, similar to the ICR data collected by USEPA.

5.6.2 Retention and Availability of Records

The Permittee shall comply with the following requirements with respect to retention and availability of records pursuant to Sections 4(b) and 39.5(7)(a), (b), (e) and (f) of the Act.

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is

readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

b. The Permittee shall retrieve and print, on paper 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 specific records during the course of a source inspection.

c. Upon written request by the Illinois EPA for copies of records or reports required to be kept by this permit, the Permittee shall promptly submit a copy of such material to the Illinois EPA. For this purpose, material shall be submitted to the Illinois EPA within 30 days unless additional time is provided by the Illinois EPA or the Permittee believes that the volume and nature of requested material would make this overly burdensome, in which case, the Permittee shall respond within 30 days with the explanation and a schedule for submittal of the requested material. (See also Condition 9.12.4.)

d. For certain records required to be kept by this permit as specifically identified in the recordkeeping provisions in Section 7 of this permit, which records are a basis for control practices or other recordkeeping required by this permit, the Permittee shall promptly submit a copy of the record to the Illinois EPA when the record is created or revised. For this purpose, the initial record shall be submitted within 30 days of the issuance of this permit. Subsequent revisions shall be submitted within 10 days of the date the Permittee begins to rely upon the revised record.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

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

i. For emissions units that are addressed by the unit-specific conditions of this permit, the timing for reporting of deviations shall be in accordance with such conditions.

ii. A. For other emissions units and activities at the source, the timing for reporting of deviations shall be in accordance with the provisions of

relevant regulations if such provisions address timing of deviation reports.

B. Otherwise, if the relevant regulations do not address timing of deviation reports, deviation reports shall be submitted within 30 days.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year including information for emissions of mercury, hydrogen chloride, hydrogen fluoride, and other hazardous air pollutants, as specified by 35 IAC Part 254. [Sections 4(b) and 39.5(7)(a), (b) and (f) of the Act]

5.8 General Operational Flexibility/Anticipated Operating Scenarios

None

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

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

6.1 NOx Trading Program

6.1.1 Description of NOx Trading Program

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

Electrical generating units (EGU) that are subject to the NOx Trading Program are referred to as "budget EGU." Sources that have one or more EGU or other units subject to the NOx Trading Program are referred to as budget sources.

The NOx Trading Program controls NOx emissions from budget EGU and other budget units during a seasonal control period from May 1 through September 30 of each year, when weather conditions are conducive to formation of ozone in the ambient air. By November 30 of each year, the allowance transfer deadline, each budget source must hold "NOx allowances" for the actual NOx emissions of its budget units during the preceding control period. The USEPA will then retire NOx 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 NOx are accurately determined.

The number of NOx allowances available for budget sources is set by the overall budget for NOx emissions established by USEPA. This budget requires a substantial reduction in NOx emissions from historical levels as necessary to meet air quality goals. In Illinois, existing budget sources initially receive their allocation or share of the NOx 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 NOx 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 NOx allowances as described above, budget sources may transfer NOx 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 NOx emissions from budget units to comply with the overall NOx budget. In particular, the NOx 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 NOx allowances from those units that can be transferred to other units at which it is more difficult to control NOx 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 NOx Trading Program with assistance from affected states. Illinois' rules for the NOx 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 NOx Trading Program, and which an individual state must follow to allow for interstate trading of allowances.

Note: This narrative description of the NOx 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 NOx 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: Units 123 and 4 (Existing Units*)
   Turbines: Units 5 and 6 (New Units)

   Note: Unit 123 is considered an existing budget EGU as it repowered existing budget EGUs, i.e., former Boilers 1, 2 and 3. Pursuant to 35 IAC 211.5580,

repowering is treated as a control technology for purposes of 35 IAC Part 217, rather than construction of a new EGU.

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 NOx Trading Program

a. This source and the budget EGU at this source shall comply with all applicable requirements of Illinois' NOx 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 NOx 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 NOx 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 NOx 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 NOx 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., NOx emissions in excess of the number of NOx allowances held as provided above, shall surrender allowances as required for deduction under 40 CFR 96.54(d)(1), pursuant to 35 IAC 217.756(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 NOx emitted in excess of the number of NOx 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 NOx Trading Program is a limited authorization to emit one ton of NOx in accordance with the NOx Trading Program. As explained by 35 IAC 217.756(d)(6), no provisions of the NOx 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 NOx Trading Program does not constitute a property right. As provided by 35 IAC 217.756(d)(4), allowances shall be held in, deducted from, or transferred among allowances accounts in accordance with 35 IAC Part 217, Subpart W, and 40 CFR 96, Subparts F and G.

6.1.5 Monitoring Requirements for Budget EGU

a. The Permittee shall comply with the monitoring requirements of 40 CFR Part 96, Subpart H, for each budget EGU and the compliance of each budget EGU with the emission limitation under Condition 6.1.4(a) shall be determined by the emission measurements recorded and reported in accordance with 40 CFR 96, Subpart H, pursuant to 35 IAC 217.756(c)(1), (c)(2) and (d)(3).

i. For Unit 4 and Unit 123, the Permittee is conducting continuous emissions monitoring for NOx, as generally provided for by 40 CFR 75.71(a).

ii. For Unit 5 and Unit 6, the Permittee is using the low mass emissions excepted methodology,

as generally provided for by 40 CFR 75.71(e)(2).

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

6.1.6 Recordkeeping Requirements for Budget EGU

Unless otherwise provided below, the Permittee shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This 5-year period may be extended for cause at any time prior to the end of the 5 years, in writing by the Illinois EPA or the USEPA.

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

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

c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx Trading Program or documents necessary to demonstrate compliance with requirements of the NOx 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 NOx 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 NOx 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 NOx Allowances to Budget EGU

a. The existing budget EGU identified in Condition 6.1.2(a) EGU are entitled to NOx allowances as follows. (The portion of Appendix F that applies to the Permittee is provided in Condition 6.1.11.) The number of NOx allowances actually allocated for the budget EGU shall be the number of NOx 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 NOx Trading Program), an annual allocation of NOx allowances as specified by 35 IAC 217.764(a)(1), i.e., the number of NOx allowances listed in Appendix F, Column 7, and as provided by 35 IAC 217.768(j), a pro-rata share of any NOx 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 NOx allowances as specified by 35 IAC 217.764(b)(1), i.e., the number of NOx allowances listed in Appendix F, Column 8, and as provided by 35 IAC 217.764(b)(4), a pro-rata share of any NOx 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 NOx allowances, i.e., the number of NOx allowances listed in Appendix F, Column 8, and as provided by 35 IAC 217.764(c)(4), a pro-rata share of any NOx 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 NOx allowances, i.e., the number of NOx allowances listed in

Appendix F, Column 9, and as provided by 35 IAC 217.764(d)(4), a pro-rata share of any NOx allowances remaining after the allocation of NOx 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 NOx allowances in the NSSA after the allocation of NOx 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 NOx allowances, i.e., the number of NOx allowances listed in Appendix F, Column 9, and a pro-rata share of any NOx allowances remaining after the allocation of NOx allowances to budget EGU that commence operation between January 1, 1995 and April 30, 2006, and a pro-rata share of any surplus of NOx allowances in the NSSA following the allocation of NOx allowances to new budget EGU.

vi. In 2011 and annually thereafter, as provided by 35 IAC 217.764(f), an allocation of NOx allowances based on the prior operation of the EGU during previous control periods, as described in Condition 6.1.8(b), and a pro-rata share of any surplus of NOx allowances in the NSSA following the allocation of NOx allowances to new budget EGU.

Note: If the start of the NOx 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 NOx allowances for the budget EGU listed in Condition 6.1.2(a), calculated as the product of the applicable NOx emissions rate and heat input as follows, shall be the basis for determining the pro-rata share of NOx allowances for the budget EGU and the allocation of NOx allowances to the budget EGU based on their prior operation:

i. The applicable NOx 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 NOx Allowances from the New Source Set-Aside (NSSA)

For the new budget EGU identified in Condition 6.1.2(a), the Permittee is eligible to obtain NOx allowances from the NSSA, as provided by 35 IAC 217.768. (The existing budget EGU are not eligible for such allowances because they are "existing.")

6.1.10 Budget Permit Required by the NOx Trading Program

a. For this source, this segment of the CAAPP Permit, i.e., Section 6.1, is the Budget Permit required by the NOx Trading Program and is intended to contain federally enforceable conditions addressing all applicable NOx 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 NOx 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 NOx

Trading Program, the application shall contain the information specified by 35 IAC 217.758(b)(2).

6.1.11 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
199856AAC	Marion 1	Marion 1	14	11	7	13	11	7
199856AAC	Marion 2	Marion 2	10	8	5	10	8	5
199856AAC	Marion 3	Marion 3	30	24	15	29	23	15
199856AAC	Marion 4	Marion 4	511	409	256	485	401	250

Note: The three units listed in the above table as Marion 1, Marion 2 and Marion 3, which are now shutdown, were repowered by Unit 123.

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: Units 123 and 4
Turbines: Units 5 and 6

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, NOx emissions of Unit 4 shall not exceed the limit set by 40 CFR Part 76, i.e., 0.86 lb/mmBtu, annual average. SO_2 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)(l) of the Act]

Note: Affected sources must hold SO_2 allowances to account for the SO_2 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_2 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 boiler units at this source.

NOx: Continuous Emissions Monitoring (40 CFR 75.12)
SO_2: Continuous Emissions Monitoring (40 CFR 75.11)
Opacity: Continuous Emission Monitoring (40 CFR 75.14)

6.2.4 Acid Rain Permit

The owners and operators of the source shall comply with the terms and conditions of the source's Acid Rain permit. [Section 39.5(17)(l) 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 Circulating Fluidized Bed (CFB) Boiler

7.1.1 Description

The Permittee operates a circulating fluidized bed (CFB) boiler for electric generation. The boiler is designed to burn a variety of solid fuels, including coal, coal refuse, petroleum coke, tire derived fuel and wood chips. The boiler has a nominal capacity of 1402 mmBtu/hour and is served by a dedicated stack. In addition to coal and other solid fuels, this boiler fires fuel oil or natural gas as auxiliary fuel during startup and for flame stabilization.

Sulfur dioxide (SO_2) emissions from the boiler are controlled by limestone injection into the bed of the boiler. Nitrogen oxide (NOx) emissions are controlled by a selective non-catalytic reduction (SNCR) system. Particulate matter (PM) emissions are controlled by a baghouse.

Construction of this boiler commenced in 2001,under Permit 00070030. The boiler repowered an existing steam turbine, replacing three old coal fired boilers, Units 1, 2 and 3. These old boilers have now been permanently removed from service. Accordingly, as provided by 35 IAC 211.5880, as Unit 123 repowered existing units, it is considered an existing unit for purposes of the NOx control requirements of 35 IAC Part 217, rather than a newly constructed unit.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Boiler ID	Description	Emission Control Equipment
Boiler Unit 123	Circulating Fluidized Bed Boiler Nominal 1,400 mmBtu/hr (2001)	Limestone Injection, SNCR and Baghouse

7.1.3 Applicability Provisions

a. i. An "affected boiler" for the purpose of these unit-specific conditions is the boiler described in Conditions 7.1.1 and 7.1.2.

ii. The affected boiler is also an "affected facility" for purposes of the New Source Performance Standards (NSPS) for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978, pursuant to 40 CFR 60.40a. As an affected facility, the boiler is subject to applicable requirements of the NSPS, 40 CFR 60 Subpart Da and related requirements in the NSPS, 40 CFR 60 Subpart A, General Provisions.

b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate the affected boiler in violation of the applicable standards in Condition 7.1.4(b) (35 IAC 212.122), Condition 7.1.4(c) (35 IAC 212.204), Condition 7.1.4(d) (35 IAC 214.121(a)), Condition 7.1.4(e) (35 IAC 216.121), and Condition 7.1.4(f) (35 IAC 217.121(d)) during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.161 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "…to minimize startup emissions, duration of individual startups and frequency of startups."

i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.

ii. The Permittee shall conduct startup of an affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups and that include, at a minimum, the following measures:

A. Use of auxiliary fuel burners to heat the boiler prior to initiating burning of coal.

B. Appropriate SNCR reagent injection to minimize emissions without damage or risk to personnel or equipment.

C. Appropriate baghouse operation to minimize emissions without damage or risk to personnel or equipment.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(c), (d), (e), and (f) and 7.1.10-2(a).

iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully

complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following terms and conditions, the Permittee is authorized to continue operation of an affected boiler in violation of the applicable requirements of Condition 7.1.4(b) (35 IAC 212.122), Condition 7.1.4(c) (35 IAC 212.204), Condition 7.1.4(d) (35 IAC 214.121(a)), Condition 7.1.4(e) (35 IAC 216.121), and Condition 7.1.4(f) (35 IAC 217.121(d)) in the event of a malfunction or breakdown of an affected boiler, including associated control equipment and support systems (coal bunkers, coal preparation systems, ash removal and handling systems, etc.). This authorization is provided pursuant to 35 IAC 201.149, 201.161 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances.

i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.1.9(c) and (i), 7.1.10-2(d) and 7.1.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.

iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions,

the Permittee shall comply with all reasonable directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.1.4 Applicable Emission Standards

a. Federal NSPS standards

i. The affected boiler is subject to New Source Performance Standards (NSPS) for Electric Utility Steam Generating Units, 40 CFR 60, Subpart Da.

ii. Pursuant to 40 CFR 60.42a(a), the emissions of PM from the affected boiler shall not exceed 0.03 lb/million Btu heat input derived from the combustion of solid, liquid, or gaseous fuel.

Note: Pursuant to 40 CFR 60.46a(a), compliance with the above limits constitutes compliance with the percent reduction requirements for PM emissions under 40 CFR 60.42a(a)(2), i.e., 1 percent of the potential combustion concentration (99 percent reduction) when combusting solid fuel.

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

iv. Pursuant to 40 CFR 60.43a(a), the emissions of SO_2 from the affected boiler shall not exceed the following limits. Compliance with the emission limit and percent reduction requirements are both determined on a 30-day rolling average basis, pursuant to 40 CFR 60.43a(g).

A. 1.20 lb/million Btu heat input and 10 percent of the potential combustion concentration (90 percent reduction), or

B. 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 0.60 lb/million Btu heat input.

v. Pursuant to 40 CFR 60.44a(d)(1), the emissions of NOx from the affected boiler shall not exceed 1.6 pounds per megawatt-hour gross energy output, based on a 30-day rolling average.

vi. Pursuant to 40 CFR 60.7(a) and 60.46a(c), the above standards in Conditions 7.1.4(a)(ii), (iii) and (v) do not apply during startup, malfunction, and shutdown, and the above standard in Condition 7.1.4(a)(iv) does not apply during startup and shutdown. For this purpose, the definitions of terms at 40 CFR 60.2 are applicable. Notwithstanding this provision, exceedances of these limitations during startup, malfunction, and shutdown are still subject to recordkeeping and reporting requirements under the NSPS.

b. The affected boiler is subject to 35 IAC 212.122, which provides that no person shall cause or allow the opacity from a new fuel combustion emission unit with a heat input greater than 250 mmBtu/hr to exceed 20 percent, except as provided by 35 IAC 212.122(b).

c. The emissions of PM from the affected boiler shall not exceed 0.1 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.204.

d. The emissions of SO_2 from the affected boiler shall not exceed 1.2 lb/mmBtu of actual heat input, pursuant to 35 IAC 214.121(a).

e. The emissions of CO from the affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.

f. The emissions of NOx from the affected boiler shall not exceed 0.7 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 217.121(d).

g. The affected boiler is subject to the following requirements related to NOx emissions pursuant to 35 IAC Part 217 Subpart V:

i. During each ozone control period (May 1 through September 30):

A. The emissions of NOx from the affected boiler shall not exceed 0.25 lb/mmBtu of actual heat input based on an ozone

control period average, for the unit, pursuant to 35 IAC 217.706(a), or

B. If the Permittee elects to participate in a NOx averaging plan, the emissions of NOx from the affected boiler and other eligible EGU that are participating in such NOx averaging demonstration shall not exceed 0.25 lbs/mmBtu of actual heat input, as averaged for the ozone control period for the EGU participating in the demonstration, pursuant to 35 IAC 217.708(a) and (b). For this purpose, other eligible EGU include: (1) Existing Boiler 4 and (2) other EGU that are authorized to participate in a NOx averaging plan by a CAAPP permit or other federally enforceable permit issued by the Illinois EPA to the owner or operator of those EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of 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.

ii. If the Permittee elects to have the affected boiler participate in a NOx averaging demonstration as provided for and authorized above:

A. The affected boiler shall be included in only one NOx averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).

B. The NOx averaging demonstration shall only include other EGU that are authorized through a federally enforceable permit to participate in a NOx 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 NOx averaging demonstration to show compliance shall be that the compliance status of the affected boiler shall be determined pursuant to Condition 7.1.4(g)(i)(A) as if the NOx emission rate of the affected boiler was not averaged with other EGU, pursuant to 35 IAC 217.708(f).

Note: The above requirements also apply as a matter of rule to EGUs other than the affected boiler if the owner or operator of such other EGUs elects to participate in a NOx averaging demonstration.

7.1.5 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected boiler not being subject to the NSPS, 40 CFR 60 Subpart D pursuant to 40 CFR 60.40(e), which provides that a steam generating unit covered by 40 CFR 60 Subpart Da is not covered under 40 CFR 60 Subpart D.

b. i. This permit is issued based on the affected boiler not being subject to NSPS standards for firing of gas or oil, i.e., 40 CFR 60.43a(b) and (h) for SO_2 and 40 CFR 60.44a(a) and (c), for NOx when it is using solid fuel as its principal fuel and other fuels are 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.

ii. If the affected boiler is not using solid fuel as its principal fuel, the affected boiler shall comply with the requirements of the following NSPS standards that address burning a combination of fuels:

A. For SO_2, 40 CFR 60.43a(h).

B. For NOx, 40 CFR 60.44a(c).

c. i. The Permittee is shielded from 35 IAC 212.207, 35 IAC 214.162, and 35 IAC 217.121(e), which address PM, SO_2, and NOx emissions from burning a combination of fuels, for the affected boiler when the boiler is using solid fuel as its principal fuel. This is because incidental use of other fuels generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel.

ii. If the affected boiler is not using solid fuel as its principal fuel, the affected boiler shall comply with the requirements of the following conditions. During such periods for PM, Condition 7.1.5(c)(ii)(A) shall substitute for Condition 7.1.4(c); for SO_2, Condition 7.1.5(c)(ii)(B), shall supplement Condition

7.1.4(d), and for NOx, Condition 7.1.5(c)(ii)(C) shall substitute for Condition 7.1.4(e).

A. The emissions of PM from the affected boiler in any one hour period shall not exceed the amount, in lb/hr, allowed by the formula in 35 IAC 212.207. For this purpose, the applicable PM standard for heat input from liquid fuel shall be 0.1 lb/mmBtu, pursuant to 35 IAC 212.206 and 212.207.

B. The emissions of SO_2 from the affected boiler in any one hour period shall not exceed the amount, in lb/hr, allowed by the formula in 35 IAC 214.162. For this purpose, the applicable SO_2 standards for heat input from residual fuel oil, distillate fuel oil shall be 0.8, 0.3 lb/mmBtu, respectively, pursuant to 35 IAC 214.121(b)(1), 214.121(b)(2), and 214.162.

C. The emissions of NOx from the affected boiler shall not exceed the amount, in lb/hr, allowed by the formula in 35 IAC 217.121(e).

iii. For the purpose of the above conditions, an affected boiler shall be considered to be using solid fuel as its principal fuel if the use of natural gas and/or fuel oil is incidental to the use of coal, occurring for specific purposes associated with routine firing of solid fuel, such as startup, opacity reduction emission mitigation, flame stabilization, outage of coal preparation equipment, or other temporary disruption in solid fuel supply. A boiler shall not be considered to be using solid fuel as its principal fuel if the use of natural gas and/or fuel oil is more than incidental to the firing of coal in the boiler or the use of fuel is incidental to the operation of the boiler.

iv. The Permittee shall notify the Illinois EPA if the status of an affected boiler changes to or from using solid fuel 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.

d. Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity and SO_2 monitoring because the Permittee must conduct opacity and SO_2 monitoring on the

affected boiler in accordance with the NSPS, 40 CFR Part 60, pursuant to the NSPS and the federal Acid Rain program.

7.1.6-1 Work Practice Requirements

a. As part of its operation and maintenance of the affected boiler, the Permittee shall perform formal "combustion evaluation" on the boiler on at least a quarterly basis, pursuant to Section 39.5(7)(d) of the Act. These evaluations shall consist of diagnostic measurements of the concentration of CO in the flue gas of the boiler, with adjustments and preventative and corrective measures for the boiler's combustion systems to maintain efficient combustion.

b. At all times, the Permittee shall maintain and operate the affected boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required pursuant to the NSPS, 40 CFR 60.11(d).

7.1.6-2 Requirements from Construction Permit 00070030

a. The emissions from the affected boiler shall not exceed the following limits. Compliance with the annual limitations shall be determined from a running total of 12 months of data, i.e., from the sum of the data for the current month plus the preceding 11 months. [T1]

Pollutant	Emission Rate	Emissions	
		(Lb/hr)	(T/yr)
NOx	1.6 lb/MW-hr	192	841
CO	0.150 lb/mmBtu	210	921
VOM	0.01 lb/mmBtu	10.1	44.2
SO_2	0.6 lb/mmBtu	841	3,690
TSP/PM_{10}	0.011 lb/mmBtu*	15.4*	67.5*

* TSP and PM_{10} limits only include front-half (filterable) particulates.

Notes: The emission limits in lb/MW-hr, lb/mmBtu and lb/hr shall not apply during start-up, shutdown, or malfunction, which are addressed by Condition 7.1.6-2(c). The NOx and SO_2 emission rate in lb/MW-hr and lb/mmBTU, respectively, are based upon a 30-day rolling average with compliance determined in accordance with the applicable provisions of the NSPS. The NOx and SO_2 emission limits in lb/mmBtu are based on the applicable provisions in the NSPS 40 CFR Part 60 Subpart Da. Compliance with other limits in lb/mmBtu and the limits in lb/hr shall be based on 3-hour block averages.

b. i. The CO emissions from the affected boiler shall not exceed 0.15 lb/mmBtu, based on a 3-hour block average, except during startup,

malfunction or breakdown and shutdown as addressed by Condition 7.1.6-2(c). [T1]

ii. The Permittee shall evaluate CO emissions from the affected boiler to determine whether a lower CO emission limit (as low as 0.10 lb/mmBtu) may be reliably achieved while complying with other emission limits without significant risk to equipment or personnel and unreasonable increase in maintenance and repair needed for the boiler. This evaluation shall be conducted in accordance with Condition 20 of Construction Permit 00070030. [T1]

c. The affected boiler and air pollution control equipment shall be operated to minimize emissions during startup, malfunction and shutdown including the following: [T1]

i. A. Operation in accordance with the manufacturer's written instructions, or other written instructions developed and maintained by the Permittee; and

B. Review of operating parameters of the unit during startup, malfunction, breakdown or shutdown as necessary to make adjustments to reduce or eliminate excess emissions.

ii. The Permittee shall maintain the affected boiler and air pollution control equipment in accordance with written procedures developed and maintained by the Permittee. These procedures shall be reviewed at least annually and enhanced consistent with good air pollution control practice based on actual operating experience and performance.

iii. Upon malfunction of the affected boiler or any air pollution control equipment that will result in emissions in excess of the applicable limits in Condition 7.1.6-2(a) or (b), the Permittee shall, as soon as practicable, repair the affected system or remove the system from service so that excess emissions cease.

iv. Consistent with the above, if the Permittee has maintained and operated the affected boiler and air pollution control equipment so that malfunctions are infrequent, sudden, not caused by poor maintenance or careless operation, and in general are not reasonably preventable, the Permittee shall begin shutdown of the system within 90 minutes, unless the malfunction is expected to be repaired within 120 minutes or such shutdown could threaten the stability of the regional electrical power system. In such

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

v. Notwithstanding the above, if the Permittee determines that the continuous emission monitoring system (CEMS) is inaccurately reporting excess emissions, the Permittee may continue operation provided the Permittee records the information it is relying upon to conclude that the affected boiler and emission control systems are functioning properly and the CEMS is reporting inaccurate data and the Permittee takes prompt action to resolve the accuracy of the CEMS.

Note: The above requirements in Conditions 7.1.6-2(a), (b) and (c) were originally established in Construction Permit 00070030 pursuant to the federal PSD rules. For emissions of CO, Conditions 7.1.6-2(b) and (c) represent the application of BACT as required by the PSD rules. For pollutants other than CO, these requirements were intended to ensure that the construction and operation of the affected boiler do not constitute a major modification under the PSD rules.

d. The fuel feed stream combusted in the affected boiler shall contain no more than 20 percent by weight, on a calendar quarter basis, of tires, tire derived fuel, and other materials which constitute municipal solid waste as defined in 40 CFR 60.51a. As a consequence of this restriction, if these supplemental fuels were fired, the affected boiler would constitute a co-fired boiler pursuant to 40 CFR 60.50b(g), provided that the Permittee notifies the USEPA of this status, with a copy of such notification also sent to the Illinois EPA.

e. i. Supplemental fuels shall be burned in a blend with commercial fuels (coal refuse, coal, petroleum coke, etc.) so as to not exceed 20 percent by weight in the total fuel supply to the affected boiler on a daily basis. For this purpose, supplemental fuels include tires and tire derived fuel, as defined in Section 54 of the Act, and clean wood, as defined in 40 CFR 60.51b.

ii. The Permittee shall handle supplemental fuels for the affected boiler in accordance with a written fuel management plan designed to assure that acceptable fuel is received and fuel is safely stored and handled. This plan shall include the specifications for acceptable fuel, anticipated sources of fuel, procedures for qualifying fuel suppliers, procedures for inspection of fuel

shipments, procedures for rejection of unacceptable shipments, and procedures for on-site handling and storage of fuel.

iii. The Permittee shall burn supplemental fuels in the affected boiler in accordance with written operating procedures designed to assure a uniform and consistent blend of fuel to the boilers and operation of the boilers in compliance with applicable requirements of this permit. This plan shall include the design and maximum amount of the fuel in the total blend, procedures for blending fuels, changes to normal operating procedures for the boiler, if any, and acceptable ranges for boiler and air pollution control equipment operating parameters, if different than normal.

iv. Nothing in these conditions shall excuse the Permittee from compliance with applicable statutes and rules governing supplemental fuels, including rules governing storage of tires.

f. The Permittee shall not burn wastes that are generated by another person's activities, other than tires and tire derived fuel in the affected boiler, without first having obtained local approval pursuant to Section 39.2 of the Act, if required, and appropriate permits from the Illinois EPA. For this purpose, a clean wood material may be considered a waste if it is a discarded material.

Note: This requirement was originally established in Construction Permit 00070030 pursuant to State authority, to address State requirements under Section 39.2 of the Act. As this condition addresses State requirements that are not federally enforceable, this condition is not a federally enforceable provision of this CAAPP permit.

7.1.7 Testing Requirements

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

a. i. Periodic PM emission measurements shall be made within a time period determined from the compliance margin for the applicable PM emission standard, based on the results of the preceding PM measurement, as follows. For this purpose, the compliance margin is the extent to which the actual PM emissions as measured are lower than the most stringent PM limit that is applicable. For example, if the measured PM emissions of the affected boiler is 0.02 lb/mmBtu, the compliance margin for the applicable PM limit, 0.01 lb/mmBtu, would be 25 percent. (0.030 – 0.02 = 0.01, 0.01/0.03 = 0.33 or 30 percent)

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

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

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

ii. PM emission measurements shall be made within 90 days of operating the affected boiler for more than 24 hours total in a calendar quarter at a load* that is more than 5 percent higher than the greatest load on the boiler during the most recent set of PM tests on the boiler in which compliance is shown (refer to Condition 7.1.7(e)(iii)(D)), provided, however, that the Illinois EPA may upon request of the Permittee provide more time for testing (if such time is reasonably needed to schedule and perform testing or coordinate testing with seasonal conditions).

* For this purpose, load shall be expressed in terms of either gross megawatt output or steam flow, consistent with the form of the records kept by the Permittee pursuant to Condition 7.1.9(a).

iii. Measurements of CO emissions shall be made with each measurement of PM emissions made pursuant to Condition 7.1.7(a)(i) or (ii) (or a RATA for SO_2 or NOx preceding such measurement).

iv. A. If commercial and supplemental fuels are less than 97.0 percent by weight of the fuel supply to a boiler during a quarter, the Permittee shall have measurements of PM and CO emissions from the boiler made during the next quarter while firing alternative fuel or process waste in the boiler.

B. The Permittee shall conduct such measurements while firing the boiler with at least 1.25 times the greatest percentage of alternative fuel material or process waste in the calendar quarter that triggered the testing. This percentage at which testing shall be conducted shall not exceed that allowed by the maximum design capacity of the alternative fuel handling system. If the boiler has been firing a

mix of supplemental fuels, alternative fuel materials or process wastes, the mix of fuel during such measurements shall be approved by the Illinois EPA.

C. The Permittee shall repeat such measurements if the percentage of alternative fuel materials and process wastes burned in a boiler during a quarter is more than the percentage of such material in the fuel supply to the boiler when previous emission measurements were conducted.

v. Measurements of PM, CO and VOM emissions shall be made within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.

Note: Construction Permit 00070030 requires that initial performance tests be conducted for the affected boiler that include measurements for emissions of PM, CO and VOM. Testing for emissions of SO_2 and NOx is also required, but may be performed in conjunction with certification of the continuous emission monitoring systems (CEMS).

b. i. These measurements shall be performed at the maximum operating load of the affected boiler and other operating conditions that are representative of normal operation. In addition, the Permittee may perform measurements at other operating conditions to evaluate variation in emissions.

ii. Measurements shall be taken at an appropriate location in the ductwork or stack associated with the affected boiler.

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

Location of Sample Points	Method 1
Gas Flow and Velocity	Method 2
Flue Gas Weight	Method 3
Moisture	Method 4
Particulate Matter (PM)	Methods 5 & 202*
Carbon Monoxide (CO)	Method 10**
Volatile Organic Material (VOM)	Methods 18 & 25/25A**

* Measurements of condensable PM are also required by USEPA Method 202 (40 CFR Part 51, Appendix M) or other established test method approved by the Illinois EPA, except for a test conducted prior to issuance of this permit.

** For CO and VOM, other test methods developed or adopted by USEPA may be used in place of the above methods with the approval of the Illinois EPA

c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to emission testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230.

   i. The Permittee shall submit this test plan at least 60 days prior to the actual date of testing and the test plan shall include the information specified by Condition 8.6.2.

   ii. Notwithstanding the above, as provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emission testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).

d. The Permittee shall notify the Illinois EPA prior to conducting emission tests to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.

e. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the tests results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:

   i. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

   ii. A description of any minor deviations from the test plan, as provided by 35 IAC 283.230(a).

iii. Detailed description of operating conditions during testing, including:

A. Source(s) of fuel and specifications (ash, sulfur and heat content).

B. Boiler operating information, i.e., firing rate of the affected boiler(s) (mmBtu/hr), composition of fuel as burned (ash, sulfur and heat content), and fuel blending ratio (%), if a blend of fuels is burned.

C. Combustion system information, i.e., settings for distribution of primary and secondary combustion air, target level for O_2 in the flue gas, and levels of CO, CO_2 or O_2 in the flue gas, as determined by any diagnostic measurements.

D. Control equipment information, i.e., equipment condition and operating parameters during testing.

E. Load during testing (gross megawatt output and steam flow).

iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

v. The SO_2, NOx, O_2 or CO_2, (hourly averages) and opacity data (6-minute averages) measured during testing.

7.1.8 Monitoring Requirements

a. Pursuant to 40 CFR 60.45a, 40 CFR 75.14, and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boiler.

i. The Permittee shall operate this equipment in accordance with the general provisions for opacity monitoring systems in 40 CFR 75.10.

ii. This monitor shall be the primary basis for reporting exceedances of Conditions 7.1.4(a)(iii) and (c). (See Conditions 7.1.10-2(a) and 7.1.10-3(a).)

b. Pursuant to 40 CFR 60.47a(b), 40 CFR 75.11, and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain a continuous emission monitoring system (CEMS) for the measurement of SO_2 emissions from the affected boiler.

i. Pursuant to NSPS, 40 CFR 60.47a(f) and (h), the Permittee shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with the CEMS, the Permittee shall supplement emission data with other monitoring systems, or USEPA Reference Method 6 shall be used to determine the SO_2 concentration at the same location as the SO_2 monitor. Samples shall be taken at 60-minute intervals. The sampling time and sample volume for each sample shall be at least 20 minutes and 0.71 dscf. Each sample represents a 1-hour average. The procedures in Method 19 shall be used to compute each 1-hour average concentration in 1b/million Btu heat input.

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

c. Pursuant to 40 CFR 60.47a(c), 40 CFR 75.12, and Section 39.5(7)(d)(iii) of the Act, the Permittee shall install, operate, calibrate and maintain a CEMS for the measurement of NOx from the affected boiler in accordance with the requirements of 40 CFR 75 Subpart B.

i. Pursuant to NSPS, 40 CFR 60.47a(f), the Permittee shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with the CEMS, the Permittee shall supplement emission data with other monitoring systems, where Method 7 shall be used to determine the NOx concentration at the same location as the NOx monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average. The procedures in Method 19 shall be used to compute each 1-hour average concentration in 1b/million Btu heat input.

d. Pursuant to Section 412 of the Clean Air Act and 40 CFR Part 75, the source is required to operate continuous monitors for the affected boiler for various parameters, including SO_2, NOx, 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. Operational Records for the Affected Boiler

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

i. An operating log that includes the occurrence and duration of each startup, shutdown or malfunction of the boiler and any malfunction of the air pollution control equipment. (See also Conditions 7.1.9(b), (f) and (g).] [40 CFR 60.7(b)]

ii. A. Operating load of the boiler (in terms of either gross megawatts output or steam flow) on an hourly basis.

B. If the Permittee is relying on data for heat input for purposes of determining compliance with applicable standards or emission limitations that is different from that recorded pursuant to the federal Acid Rain Program, records of heat input (mmBtu, on an hourly basis).

iii. Records for each day when a supplemental fuel (i.e., a commercial fuel other coal, coal refuse, oil or gas) or an alternative fuel (i.e., a fuel material that is not a commercial fuel) was burned, including the estimated amount of each such material burned

iv. Total operating hours of the boiler (hrs/quarter).

v. A. Amount of each commercial fuel consumed (tons, gallons, cubic feet per quarter, as appropriate).

B. Amount of each other fuel material consumed (tons, gallons, cubic feet per quarter, as appropriate).

vi. A. Records of agreements with suppliers of supplemental fuel(s) and alternative fuel(s) for the boiler, including origin of such material, specifications for heat content (Btu/lb) and ash content (percent by weight), and representative data for elemental composition of such material (percent by weight or ppm by weight), including mercury and other heavy metals, sulfur, chlorine and fluorine.

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

C. Written procedures, operating logs, and other records that address the requirements in Condition 7.1.6-2(e), which apply to use of supplemental and alternative fuels.

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

b. Records for Control Equipment

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

i. Maintenance and Repair Log

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

ii. Limestone Bed Injection System

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

B. Operating log including system settings.

C. Records for usage of limestone (tons/month).

iii. Selective Non-Catalytic Reduction (SNCR) System

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

B. Operating log including system settings.

C. Records for usage of reagent (tons/month).

iv. Baghouse

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

c. Records for Continuous Opacity Monitoring Systems

Pursuant to the NSPS, 60.47a(a), and Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the opacity monitoring system on the affected boiler required by Condition 7.1.8(a) that as a minimum shall include:

i. Operating records for the system, including:

A. Opacity measurements.

B. Continuous monitoring system performance testing measurements.

C. Performance evaluations and other quality assurance/control activities.

D. Calibration checks.

E. Maintenance and adjustment performed.

F. Periods other than performance of quality assurance, calibration, and maintenance, as addressed above, when the monitor was inoperative, with reason.

G. Quarterly reports submitted in accordance with NSPS, 40 CFR 60.7(c) and Condition 7.1.10-2(a) and (d).

ii. Records for the affected boiler that identify the upper bound of the 95% confidence interval (using a normal distribution and 1 minute averages) for opacity measurements from the boiler, considering an hour of operation, within which compliance with the PM limitations of Conditions 7.1.4(a)(ii) and 7.1.6-2(a) (in lb/mmBtu), is assured. These records shall be accompanied by records of the supporting explanation and documentation for these ranges, including results of historic emission tests. At a minimum, these records shall be reviewed and revised as necessary following performance of each subsequent PM emission test on the affected boiler. Copies of these records shall be submitted to the Illinois EPA in accordance with Condition 5.6.2(d).

iii. Records to address compliance with applicable limits for opacity and PM emissions, including:

A. Each 6-minute period when the opacity was above the limitation of Conditions

7.1.4(a)(iii) and 7.1.4(c) (20 percent opacity) with date, time, whether it occurred during startup, malfunction (malfunction/breakdown), or shutdown, and further explanation of the incident.

B. Each hour when the measured opacity of the affected boiler was above the upper bound, 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 PM emissions may have exceeded the limits in lb/mmBtu of Conditions 7.1.6-2(a), 7.1.4(c), or 7.1.4(a)(ii), with explanation.

C. I. The date and time of any three-hour block-average period that includes an hour when the PM emission rate in lb/mmBtu, as recorded above, exceeded the limit of Condition 7.1.6-2(a), with the estimated PM emission rates, in lb/hr, with supporting explanation and calculations.

II. The date and time of any three-hour block-average period when the average PM emission rate, in lb/hr, exceeded the hourly limit in Condition 7.1.6-2(a), with the calculated PM emission rate and supporting calculations. These records shall be prepared from the above records at least quarterly as needed to verify compliance with the limit in Condition 7.1.6-2(a).

D. Other records required by the NSPS, 40 CFR 60, Subpart Da, related to opacity and PM emissions.

E. Records of PM emissions (tons/mo and tons/yr) to address compliance with the annual PM limit in Condition 7.1.6-2(a), with supporting calculations. For periods of compliant operation, which are not addressed by the above records, these records may be based on PM emission factor(s) developed from testing of the affected boiler.

d. Records for Continuous SO_2 Monitoring Systems

Pursuant to the NSPS, 60.7(c) and 40 CFR 60.47a, and Section 39.5(7)(e) of the Act the Permittee shall

maintain records for the SO_2 CEMS on the affected boiler required by Condition 7.1.8(b) that as a minimum shall include the following:

i. Operating records for the SO_2 CEMS, including:

A. SO_2 emission data into units of the applicable standards, lb/mmBtu.

B. Continuous monitoring system performance testing measurements.

C. Performance evaluations and other quality assurance /control activities.

D. Calibration checks.

E. Maintenance and adjustments performed.

F. Periods when the SO_2 CEMS was inoperative, with date, time and reason.

G. Data reduction information.

H. Quarterly reports submitted in accordance with NSPS, 40 CFR 60.7(c), and Condition 7.1.10-2(a) and (b).

ii. Records to verify compliance with applicable SO_2 limits, including:

A. SO_2 emissions in the terms of the applicable standards (lb/mmBtu) from the affected boiler on an hourly basis, as derived from the data obtained by the SO_2 CEMS.

B. The dates of any 30-day averaging period when the SO_2 emission rate from the affected boiler, determined in accordance with the applicable compliance procedures of the NSPS, exceeded the limit of Condition 7.1.4(a)(iv), with the calculated SO_2 emission rate.

C. I. The date and time of any three-hour block averaging period, other than startup or shutdown, when the average SO_2 emission rate, in lb/mmBtu, exceeded the limit in Condition 7.1.4(d) or 7.1.6-2(a), with the calculated SO_2 emission rate.

II. The date and time of any three-hour block averaging period when the average SO_2 emission rate, in lb/hr,

exceeded the limit in Condition 7.1.6-2(a), with the calculated SO_2 emission rate and supporting calculations. These records shall be prepared from the above records at least quarterly as needed to verify compliance with the hourly SO_2 limit in Condition 7.1.6-2(a).

D. Other records required by the NSPS, 40 CFR 60 Subpart Da, related to SO_2 emissions.

E. Records of SO_2 emissions (tons/mo and tons/yr) to address compliance with the annual SO_2 limit in Condition 7.1.6-2(a), with supporting calculations.

e. Records for Continuous NOx Monitoring

Pursuant to the NSPS, 60.7(c) and 40 CFR 60.47a, 35 IAC 217.712(a), and Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the NOx CEMS on the affected boiler required by Condition 7.1.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, that as a minimum shall include:

i. Operating records for the NOx CEMS, including:

A. NOx emission data into units of the applicable standards, lb/mmBtu.

B. Continuous monitoring system performance testing measurements.

C. Performance evaluations and other quality assurance /control activities.

D. Calibration checks.

E. Maintenance and adjustments performed.

F. Periods when the CEMS was inoperative, with date, time and reason.

G. Data reduction information.

H. Quarterly reports submitted in accordance with Condition 7.1.10-2(a) and (c).

ii. Records to verify compliance with applicable NOx limits, including:

A. NOx emissions in the terms of the applicable standards (lb/mmBtu) from the affected boiler on an hourly basis, as

derived from the data obtained by the NOx CEMS.

B. The dates of any 30-day averaging period when the NOx emission rate from the affected boiler, determined in accordance with the applicable compliance procedures of the NSPS, exceeded the limit of Condition 7.1.4(a)(v), with the calculated NOx_2 emission rate.

C. I. The date and time of any three-hour block averaging period, other than startup or shutdown, when the average NOx emission rate, in lb/mmBtu, as recorded above, exceeded 0.137 lb/mmBtu or the limit of Condition 7.1.4(f), with the calculated NOx emission rate.

II. The date and time of any three-hour block averaging period when the average NOx emission rate, in lb/hr, exceeded the limit of Condition 7.1.6-2(a), with the calculated NOx emission rate and supporting calculations. These records shall be prepared from the above records at least quarterly as needed to verify compliance with the hourly NOx limit of Condition 7.1.6-2(a).

D. Other records required by the NSPS, 40 CFR 60 Subpart Da, related to NOx emissions.

E. Records of NOx emissions (tons/mo and tons/yr) to address compliance with the annual NOx limit in Condition 7.1.6-2(a), with supporting calculations.

f. Records for Startups

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

i. The source's startup procedures for the affected boiler (as required by Condition 7.1.3(b)(ii)) accompanied by the source's estimate of both total and excess emissions of PM, SO_2, CO, and NOx during typical startup(s), with supporting information and calculations.

ii. Records for each startup of the affected boiler including:

A. Date and description of startup, e.g., startup following scheduled maintenance outage. [40 CFR 60.7(b)]

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. [40 CFR 60.7(b)]

C. If normal operation is not achieved within 9 hours or if the source's startup procedures are not followed:

I. A detailed explanation why startup could not be completed sooner or the source's startup procedures were not followed.

II. Documentation for the source's startup procedures that were followed.

III. The time at which solid fuel (coal) firing was begun.

IV. SNCR reagent usage during startup.

V. Estimates of magnitude of PM, SO_2, CO and NOx emitted in excess of the applicable standards during the startup.

g. Records for Continued Operation During Malfunctions And Breakdowns

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

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

ii. Records for each incident when operation of the affected boiler continued with excess emissions, including malfunction or breakdown 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 7.1.10-3(a), as applicable, including copies of follow-up reports submitted pursuant to Condition 7.1.10-3(a)(ii).

E. If opacity exceeded the applicable standard (Condition 7.1.4(a)) for two or more hours or PM, SO_2, CO or NOx emissions may have exceeded an hourly emission standard (Condition 7.1.4(a)(ii), (c), (d), (e) or (f)):

I. A detailed explanation why continued operation of the affected boiler was necessary.

II. The preventative measures that have been or will be planned or taken to prevent similar malfunctions or breakdowns or reduce their frequency and severity, including any repairs to the affected boiler and associated equipment and any changes to its operating and maintenance procedures.

III. An estimate of the magnitude of excess emissions occurring during the incident.

h. Acid Rain Program

Records for the continuous emission monitoring required for the affected boiler by the Acid Rain Program should be kept by the source in accordance with 40 CFR Part 75, including the General Recordkeeping Provisions; the General Recordkeeping Provisions for Specific Situations, if applicable; and Certification, Quality Assurance and Quality Control Record Provisions. [See Condition 6.3.3]

i. Records for CO and VOM Emissions

The Permittee shall keep records of the CO and VOM emissions of the affected boiler (tons/month and tons/year) to verify compliance with the limits of Condition 7.1.6-2(a), with supporting documentation and calculations. The emission factors that are used for this purpose shall be based on the results of emission testing conducted pursuant to Condition 7.1.7 and the above operating records.

7.1.10-1 Reporting Requirements - Reporting of Deviations

a. Prompt Reporting of Deviations

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

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

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

iii. Notification with the reports required by Conditions 7.1.10-2(b), (c), (d) and (e) for deviations from Condition 7.1.4(a), (b), (c), (d), (f) and (g) and from the requirements of Condition 7.1.8 for emissions monitoring.

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

b. Periodic Reporting of Deviations

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

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

ii. Detailed information, as required by Condition 7.1.10-1(a)(iii) or (iv), for all other deviations not addressed in the above listing.

7.1.10-2 Reporting Requirements - Periodic Reporting

a. Quarterly Reports

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

i. These reports shall include the following information for operation of the affected boiler during the quarter:

A. The total operating hours for the affected boiler, as also reported in accordance with 40 CFR Part 75.

B. The greatest load achieved by the affected boiler (steam flow or gross megawatts).

C. A discussion of significant changes in the fuel supply to the affected boiler, if any, including changes in the source of coal, the introduction of new fuel materials other than coal, gas and oil, and changes in the source of such other fuel materials or the maximum rate at which they will be fired.

D. A list of the startups of the affected boiler, including the date, duration and description of each startup, accompanied by a copy of the records pursuant to Condition 7.1.9(g)(ii)(C) for each startup for which such records were required.

E. A copy of the records required by Condition 7.1.9(c)(iii)(B) identifying the date and time that the upper bound, as specified above in Condition 7.1.9(c)(ii), was exceeded, with operating condition if startup, malfunction, breakdown, or shutdown; with further explanation of the incident and whether particulate matter emissions may have exceeded the PM limit.

ii. These report shall include the information for SO_2, NOx, and PM emissions and opacity from the affected boiler during the quarter and the operation of required continuous monitoring systems specified by Conditions 7.1.10-2(b), (c) and (d).

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

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

b. Reporting of SO_2 Emissions

Pursuant to the NSPS, 40 CFR 60.49a, and Sections 39.5(7) (a) and (f) of the Act, the Permittee shall report the following information to the Illinois EPA in accordance with 40 CFR 60.7(c) for the affected boiler with its quarterly reports pursuant to Condition 7.1.10-2(a):

i. Summary information on the performance of the SO_2 CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the SO_2 CEMS was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.

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

iii. The information related to SO_2 emissions specified by the NSPS, 40 CFR 60, Subpart Da.

iv. The following information for each period when SO_2 emissions were in excess of the applicable limits or requirements in Conditions 7.1.4(a)(iv) or (d)* or Condition 7.1.6-2(a). When there were no such exceedances, this shall be stated in the report.

A. The starting date and time of the SO_2 excess emissions.

B. The duration of the excess emissions.

C. A copy of the records for the excess emissions, as maintained pursuant to Condition 7.1.9(d)(ii), including the measured emission rate.

D. A detailed explanation of the cause of the excess emissions.

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

* The averaging period for determining compliance with the limit of Condition 7.1.4(d) is a three-hour block average). The records for excess emissions shall consist of three-hour block emission averages during which the limit was exceeded.

c. Reporting of NOx Emissions

Pursuant to the NSPS, 40 CFR 60.49a, and Sections 39.5(7) (a) and (f) of the Act, the Permittee shall report the following information for the affected boiler to the Illinois EPA in accordance with 40 CFR 60.7(c) with its quarterly reports pursuant to Condition 7.1.10-2(a):

i. Summary information on the performance of the NOx CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the NOx the CEMS was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.

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

iii. The information related to NOx emissions specified by the NSPS, 40 CFR 60, Subpart Da.

iv. The following information for each period when NOx emissions were in excess of the limit in

Conditions 7.1.4(a)(v) or (f)* or Condition 7.1.6-2(a). 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), including the measured emission rate.

D. A detailed explanation of the cause of the excess emissions.

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

F. Identification of the previous report for the incident submitted to the Illinois EPA pursuant to Condition 7.1.10-1(b)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.

G. A summary of the records required by Condition 7.1.9(h)(ii) for incidents when operation of the affected boiler continued during malfunction or breakdown with excess emissions that are not addressed by individual reports submitted pursuant to Condition 7.1.10-3(a)(ii).

* - The averaging period to determine compliance with the limit of Condition 7.1.4(f) is a three-hour block average. The records for excess emissions shall consist of three-hour block emission averages during which the limitation was exceeded.

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

Note 2: Because the Permittee is subject to the reporting requirements of the NSPS, 40 CFR 60.7(c) and (d) for the affected boiler for opacity, as included above, the Permittee is not subject to reporting pursuant to 35 IAC 201.405 (35 IAC 201.403(a)).

d. Reporting Related to Opacity and PM Emissions

Pursuant to the NSPS, 40 CFR 60.49a, and Sections 39.5(7)(b) and (f) of the Act, the Permittee shall report the following information for the affected boiler to the Illinois EPA with its quarterly reports pursuant to Condition 7.1.10-2(a):

i. Summary information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" in accordance with 40 CFR 60.7(d). When no excess opacity occurred or the continuous opacity monitoring system was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.

ii. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative, if requested by the Illinois EPA or the opacity monitoring system downtime was more than 5 percent of the total operating time for the affected boiler during the quarter.

iii. The information related to opacity and PM emissions specified by the NSPS, 40 CFR 60, Subpart Da.

iv. The following information for each period when opacity was in excess of the applicable limit in Condition 7.1.4(a)(iii) and (b) (20 percent, six-minute average). When there were no such exceedances, this shall be stated in the report.

A. The starting dates and time of the exceedance.

B. The duration of the excess opacity.

C. The magnitude of excess opacity, based on six minute average opacity, including:

I. The percent opacity for each six-minute period.

II. The start and stop time of each six-minute period in excess of the limitation.

D. A detailed explanation of the cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction (malfunction/breakdown) or startup of the boiler.

E. Corrective actions and actions that have been or will be taken to lessen the opacity.

F. Identification of the previous report for the incident submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.

G. A summary of the records required by Condition 7.1.9(h)(ii) for incidents when operation of the affected boiler continued during malfunction or breakdown with excess emissions that are not addressed by individual reports submitted pursuant to Condition 7.1.10-3(a)(ii).

v. The following information for each period when PM emissions were in excess of the limit in Condition 7.1.4(a)(ii)(A) or 7.1.4(c). If there were no such exceedances during the reporting period, the quarterly report shall so state.

A. A summary of information for each period of exceedance that includes:

I. The starting date and time of the exceedance.

II. The duration of the exceedance.

III. The magnitude of the exceedance.

IV. The percent opacity measured for each six-minute period during the exceedance.

V. The means by which the exceedance was indicated or identified, in addition to the level of opacity.

VI. A detailed explanation of the cause of the exceedance, including whether the exceedance occurred during startup, malfunction (malfunction/breakdown) or shutdown.

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

B. Identification of the previous reports for the incidents submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii). For this purpose, the Permittee need not

resubmit copies of such report but may elect to supplement such material.

vi. The following summary information related to opacity and PM exceedances:

A. Further information for each type of recurring opacity exceedance that occurred during the quarter, including: a discussion of any circumstances or events during the quarter that generally affected the number or magnitude of such exceedances; a discussion of any additional understanding of the causes for such exceedances gained during the quarter, including the role of component failure or degradation, maintenance practices, and operating procedures; a general discussion of the effectiveness of the corrective actions that were taken in response to such exceedances; and a general discussion of further actions that are being considered to address such exceedances.

B. Further information for any new type(s) of opacity exceedances that occurred during the quarter including: a general narrative description for the type(s) of exceedance; a general explanation of the cause(s) for such exceedances, including the role of component failure or degradation, maintenance practices, and operating procedures; a detailed explanation of the corrective actions that have been taken for such exceedances, including the reasons that the selected actions were taken, the effectiveness of those actions, and the likelihood of future occurrence of similar exceedances; and a general discussion of possible further actions that could be taken to address such exceedances. For this purpose, new type(s) of exceedance are ones that have not been addressed in the preceding four quarterly opacity reports.

C. Other information relevant to generally explaining the number and magnitude of opacity and PM exceedances during the quarter, e.g., a further discussion of specific events or circumstances that occurred that affected the number of magnitude or exceedances during the quarter.

D. Information describing actions taken

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

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

e. Reporting of NOx Emissions for the Ozone Control Period

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

i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.1.4(g)(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(g)(ii)(B), this report shall contain the information specified by 35 IAC 217.712(e) and other related information as follows:

A. In all cases, for the affected boiler, the Permittee shall report the following:

I. Identification of the other EGU that are participating in the demonstration, including identification of the source that is the lead party for the demonstration and that is also taking responsibility for submitting the information required by Condition 7.1.10-2(e)(ii)(B) below.

II. A statement confirming that the unit is eligible to participate in an averaging demonstration, i.e., the unit is included in only one demonstration [35 IAC 217.708(d)]

and the Permittee is complying with applicable recordkeeping and reporting requirements for the unit, pursuant to 35 IAC 217.708(c) and (g).

III. The average 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. Confirmation that 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 7.1.10-2(e)(ii)(A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).

II. The averaged 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.

f. Submittal of Supplemental Information Related to NOx Emissions during the Ozone Control Period

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

g. Acid Rain Program Reporting

Pursuant to Sections 412 of the Clean Air Act and 40 CFR Parts 72 and 75, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application;

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

7.1.10-3 Reporting Requirements - Notifications

a. Reporting of Continued Operation During Malfunctions And Breakdowns

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

i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the applicable PM emissions standard (Condition 7.1.4(c)) could be exceeded or in which the opacity from the affected boiler exceeds 20 percent for five or more 6-minute averaging periods unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, as related to opacity, if opacity during an incident only exceeds 20 percent for no more than five 6-minute averaging periods, the Permittee need only report the incident in accordance with Condition 7.1.10-1(a)(iii) and 7.1.10-2(d).)

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

of the preventative measures that have been and are being taken.

b. Reports Associated With Introduction of Supplemental Fuels

i. The Permittee shall promptly submit monthly progress reports to the Illinois EPA while it is initially introducing a supplemental fuel into the affected boiler. This report shall include the firing rate(s) being evaluated, a description of the events and findings during the month, and a summary of CEMS emission data.

ii. At the conclusion of the introduction of a supplemental fuel, the Permittee shall promptly submit a final report to the Illinois EPA stating the maximum rate at which the fuel will be burned and providing a summary of the written fuel management plan and operating procedures prepared for use of the fuel and the range of emission rates expected from operation with such fuel.

Note: These requirements were originally established in Condition 10(f) of Construction Permit 00070030.

7.1.11 Anticipated Operating Scenarios/Operating Flexibility

The Permittee is authorized to make the following operational changes with respect to the affected boiler without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC 201.102 or, as applicable, 40 CFR 52.21(a)(2) or 35 IAC 203.207; and to comply with other legal requirements that apply to such a change:

a. Operation of additional air pollution control equipment, which is addressed by a separate construction permit.

b. Firing of commercial fuels, including supplemental fuels, or a mix of such fuels from different suppliers.

c. Firing of the following materials in conjunction with firing of standard fuels, provided that such materials can be accommodated with the existing fuel handling system and the burners in the affected boiler, and that such materials do not make up more than 10 percent by weight of the fuel supply to the boiler on a quarterly basis:

i. Other process wastes generated at the source in addition to used oil and boiler cleaning residue.

ii. Alternative fuels that do not constitute waste and were not generated from hazardous waste, such as clean lumber and wood waste (as defined at 40 CFR 60.2265), shredded polyethylene agricultural containers, and seed corn, provided that such materials are shipped to the source in homogeneous form prepared for use as fuel.

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

7.1.12 Compliance Procedures

a. i. Compliance with the opacity limitation of Conditions 7.1.4(a)(iii) and (b) (20 percent opacity) is addressed by the average opacity calculated from 6-minute periods of opacity measurements from the continuous opacity monitoring system operated in accordance with the requirements of Condition 7.1.8(a) and the recordkeeping requirements of Conditions 7.1.9.

ii. Notwithstanding Condition 7.1.12(a)(i) above, should the Permittee choose to rely on 35 IAC 212.122(b) to allow opacity greater than 20 percent (6-minute average) from an affected boiler, the Permittee shall do the following:

A. Maintain records for the affected boiler of short-term opacity data, that is, either a continuous chart recording of measured opacity, a record of discrete measurements of opacity taken no more than 10 seconds apart, or a record of 1-minute average opacity data determined from six or more data points equally spaced during each minute period, to determine whether opacity from the boiler exceeded 20 percent opacity.

B. Have the capability to review such short-term opacity data for the affected boiler to identify:

I. Any hour in which opacity exceeded 20 percent, and then, in such hour: record the duration of opacity in excess of 20 percent; whether opacity ever exceeded 40 percent; and whether the duration of opacity

in excess of 20 percent was more than 3 minutes in aggregate.

II. For the affected boiler, whether opacity in excess of 20 percent occurred in more than three hours in a 24 hour period.

C. For the existing coal-fired boiler at the source, have the ability to review short-term opacity data representative of such units during hours in which the opacity of the affected boiler on a short-term basis may exceed 20 percent, to confirm that the opacity of that unit at the source did not exceed 20 percent in any minute during an hour in which the short-term opacity of the affected boiler may have exceeded 20 percent.

D. In the reports required by Condition 7.1.10-2(d), confirm that the relevant short-term opacity data, reviewed as above, shows that the terms of 35 IAC 212.122(b) are satisfied, when 35 IAC 212.122(b) is relied upon as the basis to claim that an affected boiler did not violate Condition 7.1.4(b) even though opacity on a 6-minute average exceeded 20 percent.

E. Notify the Illinois EPA at least 15 days prior to changing its procedures associated with reliance on 35 IAC 212.122(b), to allow the Illinois EPA to review the new recordkeeping and data handling practices planned by the Permittee.

b. Compliance with PM emission limits of Conditions 7.1.4(a)(ii) and (c), and Condition 7.1.6-2(a) is addressed by continuous opacity monitoring in accordance with Condition 7.1.8(a), PM testing in accordance with Condition 7.1.7, and the recordkeeping required by Conditions 7.1.9.

c. Compliance with the SO_2 emission limits of Condition 7.1.4(a)(iv) and (d) and Condition 7.1.6-2(a) 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 and VOM emission limitation of Condition 7.1.4(e) and 7.1.6-2(a) is addressed by the required work practices in Condition 7.1.6-1(a), emission testing in accordance with Conditions 7.1.7 and the recordkeeping required by Condition 7.1.9.

e. Compliance with NOx limits of Conditions 7.1.4(a)(v), (f) and (g) and Condition 7.1.6-2(a) is addressed by continuous monitoring in accordance with Condition 7.1.8(c) and recordkeeping as required by Condition 7.1.9(e).

f. Compliance with the work practices required by Conditions 7.1.6-1 and 7.1.6-2 is addressed by the recordkeeping required by Condition 7.1.9.

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

7.2 NSPS Coal Fired Boiler - Subject to 40 CFR 60 Subpart D

7.2.1 Description

The Permittee operates a conventional coal-fired boiler for electric generation. The boiler, which was built in the 1975, has a nominal capacity of 1700 mmBtu/hour and is served by its own stack. This boiler also has the capability to fire at various modes such as combination of coal and fuel oil as their principal fuel. In addition to coal, this boiler fire natural gas or fuel oil as auxiliary fuel during startup and for flame stabilization.

Nitrogen oxide (NOx) emissions from the boiler are controlled by a selective catalytic reduction (SCR) system, which was recently installed pursuant to Construction Permit 00070028. This system is operated at the discretion of the Permittee as needed to facilitate compliance with the requirements for NOx emissions under the NOx Trading Program. Sulfur dioxide (SO_2) emissions from the boiler are controlled by a flue gas desulfurization (FGD) scrubber system. Particulate matter (PM) emissions are controlled by an electrostatic precipitator (ESP).

7.2.2 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 Unit 4	Babcock & Wilcox Boiler Nominal 1,700 mmBtu/hr (1975)	SCR, ESP and FGD

7.2.3 Applicability Provisions

a. i. An "affected boiler" for the purpose of these unit-specific conditions, is the boiler described in Conditions 7.2.1 and 7.2.2.

ii. The affected boiler is also an "affected facility" for purposes of the New Source Performance Standards (NSPS) for Fossil-Fuel Fired Steam Generators for Which Construction Is Commenced After August 17, 1971, pursuant to 40 CFR 60.40. As an affected facility, the boiler is subject to applicable requirements of the NSPS, 40 CFR 60 Subpart D and related requirements in the NSPS, 40 CFR 60 Subpart A, General Provisions.

b. Startup Provisions

Subject to the following terms and conditions, the Permittee is authorized to operate the affected boiler in violation of the applicable standards in Condition

7.2.4(b) (35 IAC 212.122), Condition 7.2.4(c) (35 IAC 212.204), Condition 7.2.4(d) (35 IAC 214.121(a)), Condition 7.2.4(e) (35 IAC 216.121), and Condition 7.2.5(b)(ii) (35 IAC 217.121(d), if applicable) during startup. This authorization is provided pursuant to 35 IAC 201.149, 201.161 and 201.262, as the Permittee has applied for such authorization in its application, generally describing the efforts that will be used "…to minimize startup emissions, duration of individual startups and frequency of startups."

i. This authorization does not relieve the Permittee from the continuing obligation to demonstrate that all reasonable efforts are made to minimize startup emissions, duration of individual startups and frequency of startups.

ii. The Permittee shall conduct startup of the affected boiler in accordance with written procedures prepared by the Permittee and maintained in the control room for the boiler, that are specifically developed to minimize emissions from startups and that include, at a minimum, the following measures:

   A. Use of auxiliary fuel burners to heat the boiler prior to initiating burning of coal.

   B. Timely energization of the ESP as soon as this may be safely accomplished without damage or risk to personnel or equipment.

   C. Appropriate SCR reagent injection to minimize emissions without damage or risk to personnel or equipment.

   D. Appropriate flow of scrubbant in the FGD scrubber to minimize excess emissions without damage or risk to personnel or equipment.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.2.9(c), (d), (e) and (f) and 7.2.10-2(a).

iv. As provided by 35 IAC 201.265, an authorization in a permit for excess emissions during startup does not shield a Permittee from enforcement for any violation of applicable emission standard(s) that occurs during startup and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

c. Malfunction and Breakdown Provisions

Subject to the following provisions, the Permittee is authorized to continue operation of an affected boiler in violation of the applicable requirements of Condition 7.2.4(b) (35 IAC 212.122), Condition 7.2.4(c) (35 IAC 212.204), Condition 7.2.4(e) (35 IAC 216.121), and Condition 7.2.5(b)(ii) (35 IAC 217.121(d), if applicable) in the event of a malfunction or breakdown of the affected boiler, including associated control equipment and support systems (limestone handling and processing, coal bunkers, coal pulverizers, ash removal and handling systems, etc.). This authorization is provided pursuant to 35 IAC 201.149, 201.161 and 201.262, as the Permittee has applied for such authorization in its application, generally explaining why such continued operation would be required to provide essential service or to prevent injury to personnel or severe damage to equipment, and describing the measures that will be taken to minimize emissions from any malfunctions and breakdowns. This authorization supersedes the general prohibition in Condition 9.2.3 against continued operation in such circumstances

i. This authorization only allows such continued operation as necessary to provide essential service or to prevent injury to personnel or severe damage to equipment and does not extend to continued operation solely for the economic benefit of the Permittee.

ii. Upon occurrence of excess emissions due to malfunction or breakdown, the Permittee shall as soon as practicable reduce boiler load, repair the affected boiler, remove the affected boiler from service or undertake other action so that excess emissions cease.

iii. The Permittee shall fulfill applicable recordkeeping and reporting requirements of Conditions 7.2.9(c) and (h), 7.2.10-2(d) and 7.2.10-3(a). For these purposes, time shall be measured from the start of a particular incident. The absence of excess emissions for a short period shall not be considered to end the incident if excess emissions resume. In such circumstances, the incident shall be considered to continue until corrective actions are taken so that excess emissions cease or the Permittee takes the boiler out of service.

iv. Following notification to the Illinois EPA of a malfunction or breakdown with excess emissions, the Permittee shall comply with all reasonable

directives of the Illinois EPA with respect to such incident, pursuant to 35 IAC 201.263.

v. This authorization does not relieve the Permittee from the continuing obligation to minimize excess emissions during malfunction or breakdown. As provided by 35 IAC 201.265, an authorization in a permit for continued operation with excess emissions during malfunction and breakdown does not shield the Permittee from enforcement for any such violation and only constitutes a prima facie defense to such an enforcement action provided that the Permittee has fully complied with all terms and conditions connected with such authorization.

7.2.4 Applicable Emission Standards

a. Federal NSPS standards

i. The affected boiler is subject to New Source Performance Standards (NSPS) for Fossil Fuel Fired Steam Generators, 40 CFR 60, Subparts A and D.

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

Pollutant	Standard (lbs/mmBtu)	Rule
PM	0.10	40 CFR 60.42(a)(1)
SO_2	1.20	40 CFR 60.43(a)(2)

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

iv. Pursuant to 40 CFR 60.7(a), the above emission limits do not apply during startup, malfunction, or shutdown, as defined by 40 CFR 60.2. Notwithstanding this provision, exceedances of these limits during startup, malfunction, and shutdown are still subject to recordkeeping and reporting requirements under the NSPS.

v. At all times, the Permittee shall maintain and operate the affected boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required pursuant to the NSPS, 40 CFR 60.11(d).

b. The affected boiler is subject to 35 IAC 212.122, which provides that no person shall cause or allow the opacity from a new fuel combustion emission unit with a heat input greater than 250 mmBtu/hr to exceed 20 percent, except as provided by 35 IAC 212.122(b).

c. The emissions of PM from the affected boiler shall not exceed 0.1 lb/mmBtu of actual heat input in any one hour period, pursuant to 35 IAC 212.204.

d. The emissions of SO_2 from the affected boiler shall not exceed 1.2 lb/mmBtu of actual heat input, pursuant to 35 IAC 214.121(a).

e. The emissions of CO from the affected boiler shall not exceed 200 ppm, corrected to 50 percent excess air, pursuant to 35 IAC 216.121.

f. The affected boiler is subject to the following requirements related to NOx emissions pursuant to 35 IAC Part 217 Subpart V:

i. During each ozone control period (May 1 through September 30):

A. The emissions of NOx from the 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), or

B. If the Permittee elects to participate in a NOx averaging plan, the emissions of NOx from the affected boiler and other eligible EGU that are participating in such NOx averaging demonstration shall not exceed 0.25 lbs/mmBtu of actual heat input, as averaged for the ozone control period for the EGU participating in the demonstration,, pursuant to 35 IAC 217.708(a) and (b). For this purpose, other eligible EGU are EGU that are authorized to participate in a NOx averaging plan by a CAAPP permit or other federally enforceable permit issued by the Illinois EPA to the owner or operator of those EGU.

Note: Given the emission determination methods specified by 35 IAC 217.710, the emissions of 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.

ii. If the Permittee elects to have the affected boiler comply by participation in a NOx

averaging demonstration as provided for and authorized above:

A. The affected boiler shall be included in only one NOx averaging demonstration during an ozone control period, pursuant to 35 IAC 217.708(d).

B. The NOx averaging demonstration shall only include other EGU that are authorized through a federally enforceable permit to participate in a NOx 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 NOx averaging demonstration to show compliance shall be that the compliance status of the affected boiler shall be determined pursuant to Condition 7.2.4(g)(i)(A) as if the NOx emission rates of the affected boiler were not averaged with other EGU, pursuant to 35 IAC 217.708(f).

Note: The above requirements also apply as a matter of rule to EGUs other than the affected boiler if the owner or operator of such other EGUs elects to participate in a NOx averaging demonstration.

7.2.5 Non-Applicability of Regulations of Concern

a. i. This permit is issued based on the affected boiler not being subject to a limit for NOx under the NSPS as provided by 40 CFR 60.44(a)(1), because the fuel supply to the boiler contains more than 25 percent by weight coal refuse.

ii. If the fuel supply to the boiler does not meet this criterion, the affected boiler is subject a NOx limit under 40 CFR 60.44(a)(1) for firing of solid fuel, e.g., for firing of bituminous coal, a limit of 0.60 lb/mmBtu and 65 percent reduction from a potential combustion concentration, except during startup, malfunction and breakdown.

b. i. This permit is issued based on the affected boiler not being subject to the NOx limit of 35 IAC 217.121(d) or (e) as provided by 35 IAC 217.521(c), because the boiler burns solid fossil fuel containing 25 percent by weight or more of coal refuse.

ii. If the fuel supply to the boiler does not meet this criterion, the boiler is subject to a NOx limit under either 35 IAC 217.121(d) (0.7 lb/mmBtu, for firing of solid fuel) or 35 IAC 217.121(e) (a limit in lb/hr, calculated for firing a combination solid fuel with gaseous or liquid fuel, as further addressed in Condition 7.2.5(e)).

c. i. This permit is issued based on the affected boiler not being subject to the NSPS standards for firing of oil, i.e., 40 CFR 60.43(a)(1) for SO_2 and 40 CFR 60.44(a)(2) for NOx, when the boiler is using solid fuel as its principal fuel and distillate fuel oil is only used in incidental amounts for specific purposes, such as startup, opacity reduction emission mitigation, flame stabilization, outage of a coal pulverizer, or other temporary disruption in solid fuel supply, as associated with routine firing of solid fuel.

ii. If the affected boiler is not using solid fuel as its principal fuel, the affected boiler shall comply with the SO_2 emission limit set by 40 CFR 60.43(b), which addresses units burning a combination of fuels.

iii. If the affected boiler is not using solid fuel as its principal fuel <u>and</u> coal refuse is 25 percent or less by weight of the fuel being fired in the boiler, the affected boiler shall comply with the NOx emission limit set by 40 CFR 60.44(b), which addresses units burning a combination of fuels.

d. i. The Permittee is shielded from the following rules for the affected boiler when the boiler is using solid fuel (coal) as its principal fuel. This is because incidental use of other fuels generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel:

A. 35 IAC 212.207, for PM emissions.

B. 35 IAC 214.162, for SO_2 emissions.

ii. If the affected boiler is not using solid fuel as its principal fuel, the affected boiler shall comply with the requirements of the following conditions. During such periods, for PM, Condition 7.2.5(d)(ii)(A) shall substitute for

Condition 7.2.4(c) and, for SO_2, Condition 7.2.5(d)(ii)(B) shall substitute for Condition 7.2.4(d):

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 equation in 35 IAC 212.207. For this purpose, the applicable PM standard for heat input from liquid fuel shall be 0.1 lb/mmBtu, pursuant to 35 IAC 212.206 and 212.207.

B. The emissions of SO_2 from the affected boiler in any one hour period shall not exceed the amount, in lb/hr, allowed by the equation in 35 IAC 214.162. For this purpose, the applicable SO_2 standards for heat input from residual fuel oil and distillate fuel oil shall be 0.8 and 0.3 lb/mmBtu, respectively, pursuant to 35 IAC 214.121(b)(1), 214.121(b)(2), and 214.162.

iii. For the purpose of this condition and Condition 7.2.5(e), the affected boiler shall be considered to be using solid fuel as its principal fuel if the use of natural gas and fuel oil is incidental to the use of solid fuel (coal), occurring for specific purposes associated with routine firing of solid fuel, such as startup, opacity reduction emission mitigation, flame stabilization, outage of a coal pulverizer, or other temporary interruption in solid fuel supply. A boiler shall not be considered to be using solid fuel as its principal fuel if the use of natural gas and fuel oil is more than incidental to the firing of coal in the boiler or the use of solid fuel is incidental to the operation of the boiler.

iv. The Permittee shall notify the Illinois EPA if the status of the affected boiler changes to or from using solid fuel 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.

d. If solid fossil fuel containing less than 25 percent coal refuse by weight is burned in the affected boiler, so that NOx emissions of the boiler are subject to 35 IAC 217.121:

i. If the boiler is using solid fuel (coal) as its principal fuel, the NOx emissions of the boiler

shall not exceed 0.07 lb/mmBtu in any one hour period, pursuant to 35 IAC 217.121(d) and the Permittee is shielded from 35 IAC 217.121(e). This is because incidental use of other fuels with solid fuel generally serves as a good combustion practice for firing of solid fuel and does not provide a decrease in emissions that can be used to reduce the emission rate that must be achieved for the emissions associated with combustion of solid fuel.

ii. If the affected boiler is not using solid fuel as its principal fuel, the affected boiler shall comply with 35 IAC 217.121(e), i.e., the emissions of NOx from the boiler shall not exceed the amount, in lb/hr, allowed by the equation in 35 IAC 217.121(e).

f. Pursuant to 35 IAC 201.403(a), the Permittee is not subject to the requirements of 35 IAC Part 201 Subpart L for opacity and SO_2 monitoring because the Permittee must conduct opacity and SO_2 monitoring on the affected boiler in accordance with the NSPS, 40 CFR Part 60, and the federal Acid Rain program.

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

a. As part of its operation and maintenance of the affected boiler, the Permittee shall perform formal "combustion evaluation" on the boiler on at least a quarterly basis, pursuant to Section 39.5(7)(d) of the Act. These evaluations shall consist of diagnostic measurements of the concentration of CO in the flue gas of the affected boiler, with adjustments and preventative and corrective measures for the boiler's combustion systems to maintain efficient combustion.

7.2.7 Testing Requirements

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

a. i. PM emission measurements shall be made no later than 2 years after the effective date of this condition. (Measurements made after December 31, 2003 may satisfy this requirement.)

ii. PM emission measurements shall be made within 90 days of operating the affected boiler for more than 30 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 7.2.7(e)(iii)(D)), provided, however, that the

Illinois EPA may upon request of the Permittee provide more time for testing (if such time is reasonably needed to schedule and perform testing or coordinate testing with seasonal conditions).

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

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

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

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

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

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

A. In conjunction with the initial measurements of PM emissions as required by Condition 7.2.7(a)(i) (unless this PM measurement is conducted prior to the issuance of this permit), if a measurement of CO emissions is not otherwise performed earlier in conjunction with a relative accuracy test audit (RATA) for SO_2 or NOx conducted under this permit.

B. In conjunction with each subsequent measurement of PM emissions made pursuant to Condition 7.2.7(a)(ii) or (iii) (or a RATA for SO_2 or NOx preceding such measurement), provided, however, that if

measured CO emissions are no more than half of the applicable limits, CO measurements need not be performed with the next PM measurement (or preceding RATA) but shall be performed with the second measurement of PM emissions following the measurement in which CO emissions were no more half of the applicable limits (or a RATA preceding that PM measurement).

v. A. If standard fuel (i.e., coal, coal refuse, fuel oil, and gas) is less than 97.0 percent by weight of the fuel supply to a boiler during a quarter, the Permittee shall have measurements of PM and CO emissions from the boiler made during the next quarter while firing alternative fuel or process waste in the boiler.

B. The Permittee shall conduct such measurements while firing the boiler with at least 1.25 times the greatest percentage of alternative fuel material or process waste in the calendar quarter that triggered the testing. This percentage at which testing shall be conducted shall not exceed that allowed by the maximum design capacity of the alternative fuel handling system. If the boiler has been firing a mix of alternative fuel materials or process wastes, the mix of fuel during such measurements shall be approved by the Illinois EPA.

C. The Permittee shall repeat such measurements if the percentage of alternative fuel materials and process wastes burned in a boiler during a quarter is more than the percentage of such material in the fuel supply to the boiler when previous emission measurements were conducted.

vi. Measurements of PM and CO emissions shall be made within 90 days (or such later date set by the Illinois EPA) following a request by the Illinois EPA for such measurements.

b. i. These measurements shall be performed at the maximum operating loads of the affected boiler and other operating conditions that are representative of normal operation. In addition, the Permittee may perform measurements at other operating conditions to evaluate variation in emissions.

ii. Measurements shall be taken at an appropriate location in the ductwork or stack associated with the affected boiler.

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

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter (PM)	USEPA Methods 5 & 202*
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

*Measurements of condensable PM are also required by USEPA Method 202 (40 CFR Part 51, Appendix M) or other established test method approved by the Illinois EPA, except for a test conducted prior to issuance of this permit.

c. Except for minor deviations in test methods, as defined by 35 IAC 283.130, emission testing shall be conducted in accordance with a test plan prepared by the testing service or the Permittee and submitted to the Illinois EPA for review prior to emission testing, and the conditions, if any, imposed by the Illinois EPA as part of its review and approval of the test plan, pursuant to 35 IAC 283.220 and 283.230.

i. The Permittee shall submit this test plan at least 60 days prior to the actual date of testing and the test plan shall include the information specified by Condition 8.6.2.

ii. Notwithstanding the above, as provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emission testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).

d. The Permittee shall notify the Illinois EPA prior to conducting emission tests to enable the Illinois EPA to observe testing. Notification for the expected test date shall be submitted a minimum of 30 days prior to the expected date of testing. Notification of the actual date and expected time of testing shall

be submitted a minimum of 5 working days prior to the actual test date. The Illinois EPA may on a case-by case basis accept shorter advance notice if it would not interfere with the Illinois EPA's ability to observe testing.

e. The Permittee shall submit the Final Report(s) for any required emission testing to the Illinois EPA within 45 days after the tests results are compiled and finalized but no later than 120 days after the date of testing. The Final Report shall include the information specified in Condition 8.6.3 and the following information:

i. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

ii. A description of any minor deviations from the test plan, as provided by 35 IAC 283.230(a).

iii. Detailed description of operating conditions during testing, including:

A. Source(s) of fuel and specifications (ash, sulfur and heat content).

B. Boiler operating information, i.e., firing rate of the affected boiler(s) (mmBtu/hr), composition of fuel as burned (ash, sulfur and heat content), and fuel blending ratio (%), if a blend of fuels is burned.

C. Combustion system information, i.e., settings for distribution of primary and secondary combustion air, target level for O_2 in the flue gas, and levels of CO, CO_2 or O_2 in the flue gas, as determined by any diagnostic measurements.

D. Control equipment information, i.e., equipment condition and operating parameters during testing, including any use of the flue gas conditioning system.

E. Load during testing (gross megawatt output and steam flow).

iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

v. The SO_2, NOx, O_2 or CO_2 and opacity data (6-minute averages and hourly averages) measured during testing.

7.2.8 Monitoring Requirements

a. Pursuant to 40 CFR 60.45, 40 CFR 75.14, and Section 39.5(7)(d)(iii) of the Act , the Permittee shall install, operate, calibrate and maintain continuous monitoring equipment for the measurement of opacity from the affected boiler.

   i. This monitoring equipment shall meet the design, installation, equipment, and performance specifications in Performance Specification B in 40 CFR Part 60, Appendix B.

   ii. The Permittee shall operate this equipment in accordance with the general provisions for opacity monitoring systems in 40 CFR 75.10.

   iii. These monitors shall be the primary basis for reporting of exceedances of Condition 7.2.4(b). (See Conditions 7.2.10-2(a) and 7.2.10-3(a).)

b. Pursuant to Section 39.5(7)(d)(iii) of the Act, 40 CFR 75.11, and the NSPS, 40 CFR 60.45, the Permittee shall install, operate, calibrate and maintain a continuous emission monitoring system (CEMS) for the measurement of SO_2 emissions from the affected boiler which shall be used to demonstrate compliance with the limits in Condition 7.2.4(d) based on the average hourly SO_2 emission rate determined from monitored data from three-hour block averaging periods. This CEMS 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.

   Note 1: This permit is issued based on the Permittee performing continuous emission monitoring for SO_2 rather than fuel sampling and analysis for sulfur content, as provided by 40 CFR 60.45(b)(2). In addition, the permit allows the use of an "Acid Rain Monitoring System", operated to comply with 40 CFR Part 75, in lieu of an "NSPS Monitoring System", as authorized by USEPA guidance from the Stationary Source Compliance Division of the Office of Air Quality Planning and Standards, as such monitoring is equivalent or more stringent.

   Note 2: The requirements of 35 IAC Part 201 Subpart L for SO_2 monitoring do not apply because the Permittee must conduct SO_2 monitoring for the affected boiler in accordance with the NSPS. (Refer to Condition 7.1.5(d).)

c. Pursuant to 40 CFR 60.45, 40 CFR 75.12, 35 IAC 217.710(a), and Section 39.5(7)(d)(iii) of the Act, the Permittee, shall install, calibrate, maintain and operate a CEMS for the measurement of NOx emissions

from the affected boiler, in accordance with the requirements of 40 CFR 75 Subpart B.

d. Pursuant to Section 412 of the Clean Air Act and 40 CFR Part 75, the source is required to operate continuous monitors for the affected boiler for various parameters, including SO_2, NOx, 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)

7.2.9 Recordkeeping Requirements

a. Operational Records for the Affected Boiler

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

i. An operating log that includes the occurrence and duration of each startup, shutdown or malfunction of the boiler and any malfunction of the air pollution control equipment. [40 CFR 60.7(b)] (See also Conditions 7.1.9(b), (f) and (g).]

ii. A. Load (in terms of either gross megawatts output or steam flow) on an hourly basis.

B. If the Permittee is relying on data for heat input for purposes of compliance with Condition 7.1.4(a)(ii), (c) or (d) that is different from that recorded pursuant to the federal Acid Rain Program, records of heat input (mmBtu, on an hourly basis) or the conversion factors that the Permittee relies upon to convert from boiler load as recorded above to hourly heat input.

iii. Records for each day when a supplemental fuel (i.e., a commercial fuel other coal, coal refuse, oil or gas) or an alternative fuel (i.e., a fuel material that is not a commercial fuel) was burned, including the estimated amount of each such material burned

iv. Total operating hours of eth boiler (hrs/quarter).

v. A. Consumption of coal (tons/quarter).

B. Consumption of coal refuse (tons/quarter).

C. Amount of each other fuel material consumed (tons, gallons, cubic feet per quarter, as appropriate).

vi. A. Records of agreements with suppliers of supplemental fuel(s) and alternative fuel(s) for the boiler, including origin of material, specifications for heat and ash content, and representative data for elemental composition of such material, including mercury and other heavy metals, chlorine and fluorine.

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

vii. An operating log, maintenance and repair log, or other records for the affected boiler documenting the performance of the combustion evaluation required by Condition 7.2.6(a), including the date of the evaluation, the concentrations of CO measured at the start and conclusion of the evaluation, and a description of adjustments and preventative and corrective measures undertaken for the combustion systems of the boiler.

b. Records for Control Equipment

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

i. Maintenance and Repair Log

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

ii. Selective Catalytic Reduction (SCR) System

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

B. Operating log including system settings.

Note: These records for the SCR system are only required during periods when the Permittee operates this system, which is operated at its discretion as needed to facilitate compliance with the requirements of the NOx Trading Program.

C. Usage of reagent (tons/month).

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

ii. Electrostatic precipitator (ESP)

When the affected boiler is in operation:

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

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

iii. Flue gas desulfurization (FGD) scrubber system

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

B. An operating log including usage of limestone and system settings.

c. Records for Continuous Opacity Monitoring Systems

Pursuant to 40 CFR 60.45, 40 CFR 75.50, and Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the opacity monitoring system on the affected boiler required by Condition 7.2.8(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 NSPS, 40 CFR 60.7(c) and Condition 7.2.10-2(a) and (d).

ii. Records for the affected boiler that identify the upper bound of the 95% confidence interval (using a normal distribution and 1 minute averages) for opacity measurements from the boiler, considering an hour of operation, within which compliance with Conditions 7.2.4(a)(ii) and 7.2.4(b) is assured, with supporting explanation and documentation, including results of historic emission tests. At a minimum, these records shall be reviewed and revised as necessary following performance of each subsequent PM emission test on the affected boiler. Copies of these records shall be submitted to the Illinois EPA in accordance with Condition 5.6.2(d).

iii. Records to address compliance with Conditions 7.2.4(a)(ii), (a)(iii), (b), and (c) including:

A. Each 6-minute period when the opacity was above the limitation of Conditions 7.2.4(a)(iii) and 7.2.4(b) (20 percent opacity) with date, time, whether it occurred during startup, malfunction (malfunction/breakdown), or shutdown, and further explanation of the incident.

B. Each hour when the measured opacity of the affected boiler was above the upper bound, as specified above in Condition 7.2.9(c)(ii), with date, time, operating condition if startup, malfunction, (malfunction/breakdown), or shutdown, further explanation of the incident, and whether PM emissions may have exceeded the limit of Conditions 7.2.4(a)(ii) and (c), with explanation.

d. Records for Continuous SO_2 Monitoring Systems

Pursuant to Section 39.5(7)(e) of the Act and the NSPS, 40 CFR 60.45, the Permittee shall maintain records for the SO_2 CEMS on the affected boiler required by Condition 7.2.8(b) that as a minimum shall include the following:

i. Operating records for the SO_2 CEMS, including:

A. SO_2 emission data into units of the applicable standards (lb/mmBtu) calculated in accordance with NSPS, 40 CFR 60.45(e).

B. Continuous monitoring system performance testing measurements.

C. Performance evaluations and other quality assurance/control activities.

D. Calibration checks.

E. Maintenance and adjustments performed.

F. Periods when the SO_2 CEMS was inoperative, with date, time and reason.

G. Data reduction information.

H. Quarterly reports submitted in accordance with NSPS, 40 CFR 60.7(c) and Condition 7.2.10-2(a) and (b).

ii. Records to verify compliance with the SO_2 limit of Conditions 7.2.4(a)(ii) and (d), including:

A. SO_2 emissions in the terms of the applicable limit (lb/mmBtu) from the affected boiler on an hourly basis, as derived from the data obtained by the SO_2 CEMS.

C. The date and time of any three-hour rolling averaging period when the total SO_2 emission rate, as recorded above, exceeded 1.2 lb/mmBtu as allowed by Condition 7.2.4(a)(ii) and 7.2.4(d), with the calculated SO_2 emission rate.

e. Records for Continuous NOx Monitoring

Pursuant to 40 CFR 60.45, 40 CFR 75.50, 35 IAC 217.712(a), and Section 39.5(7)(e) of the Act, the Permittee shall maintain records for the NOx CEMS on the affected boiler required by Condition 7.2.8(c) in accordance with the applicable recordkeeping requirements of 40 CFR 75, that as a minimum shall include the following:

i. Operating records for the NOx CEMS, including:

A. NOx emission data into units of the applicable standards (lb/mmBtu) calculated in accordance with NSPS, 40 CFR 60.45(e).

B. Continuous monitoring system performance testing measurements.

C. Performance evaluations and other quality assurance /control activities.

D. Calibration checks.

E. Maintenance and adjustments performed.

F. Periods when the CEMS was inoperative, with date, time and reason.

G. Data reduction information.

H. Quarterly reports submitted in accordance with Condition 7.2.10-2(a) and (c).

ii. Records to verify compliance with any short-term NOx limit that is applicable, including:

A. NOx emissions in lb/mmBtu from the affected boiler on an hourly basis, as derived from the data obtained by the NOx monitoring equipment.

B. The date and time of any period when the NOx emission rate exceeded the applicable limit.

f. Records for Startups

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

i. The Permittee's startup procedures for the affected boiler (as required by Condition 7.2.3(b)(ii)), accompanied by the Permittee's estimate of both total and excess opacity and emissions of PM, NOx, CO and SO_2 during typical startup(s), with supporting information and calculations.

ii. Records for each startup of the affected boiler that, as a minimum, include the following information:

A. Date, time, duration and description of the startup.

B. The elapsed time from initial firing of auxiliary fuel to achievement of stable operation of the boiler with the principal fuel and with boiler systems and control devices operating to enable compliance with applicable standards for opacity and emissions of PM, NOx, CO and SO2.

C. If this elapsed time is more than 6 hours or if the Permittee's startup procedures are not followed:

I. A detailed explanation why startup of the boiler was not completed sooner or startup procedures were not followed.

II. Documentation for the startup procedures that were followed.

III. The elapsed time from initial firing of auxiliary fuel until firing of the principal fuel was begun.

IV. The flue gas temperature at which the ESP was energized, if coal was fired before the ESP was energized.

III. Estimates of the magnitude of emissions of PM and CO during the startup, including whether emissions may have exceeded any applicable hourly standard, as listed in Condition 7.2.4.

VI. Emissions of NOx and boiler load during the startup, on an hourly basis, as monitored.

g. Records for Continued Operation During Malfunctions And Breakdowns

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

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

ii. Records for each incident when operation of the affected boiler continued with excess opacity or emissions, including malfunction or breakdown as addressed by Condition 7.2.3(c), that, at a minimum, include the following information:

A. Date, time, duration and description of the incident.

B. The corrective actions used to reduce the quantity of emissions and the duration of the incident.

C. Confirmation of fulfillment of the requirements of Condition 7.2.10-3(a), as applicable, including copies of follow-up reports submitted pursuant to Condition 7.2.10-3(a)(ii).

D. If opacity exceeded the applicable standard for two or more hours or emissions exceeded or may have exceeded an applicable hourly standard, as listed in Condition 7.2.4, during the incident:

I. A detailed explanation why continued operation of the affected boiler was necessary.

II. The preventative measures that have been or will be taken to prevent similar incidents or reduce their frequency and severity, including any repairs to the affected boiler and associated equipment and any changes to operating and maintenance procedures.

III. Estimates of magnitude of emissions of PM and CO during the incident, as emissions exceeded or may have exceeded any applicable hourly standard.

IV. Emissions of NOx of SO_2during the incident, on an hourly basis, if monitored emissions exceeded the applicable hourly standard.

h. Acid Rain Program

Records for the continuous emission monitoring required for the affected boiler by the Acid Rain Program should be kept by the source in accordance with 40 CFR Part 75, including the General Recordkeeping Provisions; the General Recordkeeping Provisions for Specific Situations, if applicable; and Certification, Quality Assurance and Quality Control Record Provisions. [See Condition 6.3.3]

7.2.10-1 Reporting Requirements – Reporting of Deviations

a. Prompt Reporting of Deviations

For the affected boiler, the Permittee shall promptly notify the Illinois EPA of deviations from permit requirements as follows. At a minimum, these notifications shall include a description of such

deviations, including whether they occurred during startup or malfunction/breakdown, and a discussion of the possible cause of such deviations, any corrective actions and any preventative measures taken. [Section 39.5(7)(f)(ii) of the Act]

i. Notification and reporting as specified in Condition 7.2.10-3(a) for certain deviations from the PM limit in the PM limits in Condition 7.2.4(a)(ii) and (c).

ii. Notification and reporting as specified in Condition 7.2.10-3(a) for certain deviations from the opacity limits in the opacity limit in Conditions 7.2.4(a)(iii) and (b).

iii. Notification with the reports required by Conditions 7.2.10-2(b), (c), (d) and (e) for deviations from Conditions 7.2.4(a), (b), (c), (d) and (f) and from the requirements of Condition 7.1.8 for emissions monitoring.

iv. Notification with the quarterly reports required by Condition 7.2.10-2(a) for deviations not addressed above by Condition 7.2.10-1(a)(i), (ii) or (iii), including deviations from other applicable requirements, e.g., the applicable CO emission standard, work practice requirements, and recordkeeping requirements.

b. Periodic Reporting of Deviations

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

ii. A listing of all instances of deviations that have been reported in writing to the Illinois EPA as provided by Condition 7.2.10-2(g)(i) and (ii), including identification of each such written notification or report. For this purpose, the Permittee need not resubmit copies of these previous notifications or reports but may elect to supplement such material.

ii. Detailed information, as required by Condition 7.2.10-2(g)(iii) or (iv), for all other deviations not addressed in the above listing.

7.2.10-2 Reporting Requirements – Periodic Reporting

a. Quarterly Reports

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

submit quarterly reports to the Illinois EPA pursuant to Sections 39.5(7)(a) and (f) of the Act.

i. These report shall include the following information for operation of the affected boiler during the quarter:

A. The total operating hours for the affected boiler, as also reported in accordance with 40 CFR Part 75.

B. The greatest load achieved by the affected boiler (steam flow or gross megawatts).

C. A discussion of significant changes in the fuel supply to the affected boiler, if any, including changes in the source of coal, the introduction of new fuel materials other than coal, gas and oil, and changes in the source of such other fuel materials or the maximum rate at which they will be fired.

D. A list of the startups of the affected boiler, including the date, duration and description of each startup, accompanied by a copy of the records pursuant to Condition 7.2.9(g)(ii)(C) for each startup for which such records were required.

E. A copy of the records required by Condition 7.2.9(c)(iii)(B) identifying the date and time that the upper bound, as specified above in Condition 7.2.9(c)(ii), was exceeded, with operating condition if startup, malfunction, breakdown, or shutdown; with further explanation of the incident and whether particulate matter emissions may have exceeded the PM limit.

ii. These report shall include the information for SO_2, NOx, and PM emissions and opacity from the affected boiler during the quarter and the operation of required continuous monitoring systems specified by Conditions 7.2.10-2(b), (c) and (d).

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

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

b. Reporting of SO_2 Emissions

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

i. Summary information on the performance of the SO_2 CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the SO_2 CEMS was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.

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

iii. The following information for each period when SO_2 emissions were in excess of the applicable standards specified in Condition 7.2.4(a)(ii) and 7.2.4(d)*. When there were no such exceedances, this shall be stated in the report.

A. The starting date and time of the SO_2 excess emissions.

B. The duration of the excess emissions.

C. A copy of the records for the excess emissions, as maintained pursuant to Condition 7.2.9(d)(ii), including the measured emission rate.

D. A detailed explanation of the cause of the excess emissions.

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

* - For SO_2 emissions, the averaging period is a three-hour rolling average, as used to determine compliance with the limitations of Condition 7.2.4(d). The records for excess emissions shall consist of three-hour rolling emission averages during which the limitation was exceeded.

c. Reporting of NOx Emissions

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

i. Summary information on the performance of the NOx CEMS, including the information for a "Summary Report" specified by 40 CFR 60.7(d). When the NOx CEMS was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.

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

iii. The following information for each period when NOx emissions were subject to an hourly emission standard and emission were in excess of the limit of such standard. When there were no such exceedances or a short-term NOx limit was not applicable during all or part of the quarter, 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 7.2.9(e)(ii), including the measured emission rate.

D. A detailed explanation of the cause of the excess emissions.

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

F. Identification of the previous report for the incident submitted to the Illinois EPA pursuant to Condition 7.2.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.

G. A summary of the records required by Condition 7.2.9(h)(ii) for incidents when operation of the affected boiler continued during malfunction or breakdown with excess emissions that are not addressed by individual reports submitted pursuant to Condition 7.2.10-3(a)(ii).

d. Reporting Related to Opacity and PM Emissions

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

i. Summary information on the performance of the opacity monitoring system and excess emissions, as required for a "Summary Report" in accordance with 40 CFR 60.7(d). When no excess opacity occurred or the continuous opacity monitoring system was not inoperative, repaired or adjusted except for zero and span checks, this shall be stated in the report.

ii. The operating status of the opacity monitoring system, including the dates and times of any periods during which it was inoperative, if requested by the Illinois EPA or the opacity monitoring system downtime was more than 5 percent of the total operating time for the affected boiler during the quarter.

iii. The following information for each period when opacity was in excess of the applicable standards specified in Conditions 7.2.4(a)(iii) and 7.2.4(b), for any six-minute period during which the average opacity of emissions exceeds 20 percent opacity.

A. The starting dates and time of the exceedance.

B. The duration of the excess opacity.

C. The magnitude of excess opacity, based on six minute average opacity, including:

I. The percent opacity for each six-minute period.

II. The start and stop time of each six-minute period in excess of the limitation.

D. The cause of excess opacity, if known, including whether such excess opacity occurred during startup, malfunction or breakdown of the boiler.

E. Corrective actions and actions taken to lessen the opacity.

F. Identification of the previous report for the incident submitted to the Illinois EPA pursuant to Condition 7.2.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.

G. A summary of the records required by Condition 7.2.9(g)(ii) for incidents when operation of the affected boiler continued during malfunction or breakdown with excess emissions that are not addressed by individual reports submitted pursuant to Condition 7.2.10-3(a)(ii).

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

iv. The following information for periods when PM emissions were in excess of the limitation in Conditions 7.2.4(a)(ii) and 7.2.4(c). If there were no such exceedances during the reporting period, the quarterly report shall so state.

A. A summary of information for each period of exceedance that includes:

I. The starting date and time of the exceedance.

II. The duration of the exceedance.

III. The magnitude of the exceedance.

IV. The percent opacity measured for each six-minute period during the exceedance.

V. The means by which the exceedance was indicated or identified, in addition to the level of opacity.

VI. The cause of the exceedance, including whether the exceedance occurred during startup, malfunction or breakdown.

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

B. Identification of the previous reports for the incidents submitted to the Illinois EPA pursuant to Condition 7.1.10-3(a)(ii). For this purpose, the Permittee need not resubmit copies of such report but may elect to supplement such material.

v. The following summary information related to opacity and PM exceedances:

A. Further information for each type of recurring opacity exceedance that occurred during the quarter, including: a discussion of any circumstances or events during the quarter that generally affected the number or magnitude of such exceedances; a discussion of any additional understanding of the causes for such exceedances gained during the quarter, including the role of component failure or degradation, maintenance practices, and operating procedures; a general discussion of the effectiveness of the corrective actions that were taken in response to such exceedances; and a general discussion of further actions that are being considered to address such exceedances.

B. Further information for any new type(s) of opacity exceedances that occurred during the quarter including: a general narrative description for the type(s) of exceedance; a general explanation of the cause(s) for such exceedances, including the role of component failure or degradation, maintenance practices, and operating procedures; a detailed explanation of the corrective actions that have been taken

for such exceedances, including the reasons that the selected actions were taken, the effectiveness of those actions, and the likelihood of future occurrence of similar exceedances; and a general discussion of possible further actions that could be taken to address such exceedances. For this purpose, new type(s) of exceedance are ones that have not been addressed in the preceding four quarterly opacity reports.

C. Other information relevant to generally explaining the number and magnitude of opacity and PM exceedances during the quarter, e.g., a further discussion of specific events or circumstances that occurred that affected the number of magnitude or exceedances during the quarter.

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

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

e. Reporting of NOx Emissions for the Ozone Control Period

The Permittee shall submit a report to the Illinois EPA by November 30 of each year that demonstrates whether the affected boiler has complied with Condition 7.2.4(f), pursuant to 35 IAC 217.712(d) and (e).

i. If the Permittee is demonstrating compliance on a unit-specific basis with Condition 7.2.4(g)(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 7.2.4(g)(ii)(B), this report shall contain the information specified by 35 IAC 217.712(e) and other related information as follows:

A. In all cases, for the affected boiler or unit covered by this permit that is participating in the 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 7.2.10-2(e)(ii)(B) below.

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

   III. The average 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 7.2.10-2(e)(ii)(A) above (unless or except as this information is provided with the submittal by a person who is a responsible official for the EGU participating in the demonstration).

II. The averaged 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.

f. Submittal of Supplemental Information Related to NOx Emissions during the Ozone Control Period

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

g. Acid Rain Program Reporting

Pursuant to Sections 412 of the Clean Air Act and 40 CFR Parts 72 and 75, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application; Quarterly Reports; and Opacity Reports. [See Condition 6.2.3] Pursuant to Section 39.5(17)(m) of the Act, the designated representative of the source must concurrently submit to the Illinois EPA in the same electronic format specified by the USEPA, the data and information submitted to USEPA on a quarterly basis pursuant to 40 CFR 75.64.

7.2.10-3 Reporting Requirements - Notifications

a. Reporting of Continued Operation During Malfunctions And Breakdowns

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

i. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the applicable PM emissions standards (Condition 7.2.4(a)(ii) and (c)) could be exceeded or in which the opacity from the affected boiler exceeds 20 percent for five or

more 6-minute averaging periods unless the Permittee has begun the shutdown of the affected boiler by such time. (Otherwise, as related to opacity, if opacity during a incident only exceeds 20 percent for no more than five 6-minute averaging periods, the Permittee need only report the incident in accordance with Condition 7.2.10-1(a)(iii) and 7.2.10-2(d).)

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

7.2.11 Anticipated Operating Scenarios/Operating Flexibility

The Permittee is authorized to make the following operational changes with respect to the affected boiler without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements; to properly obtain a construction permit in a timely manner for any activity constituting construction or modification as defined in 35 IAC 201.102 or, as applicable, 40 CFR 52.21(a)(2) or 35 IAC 203.207; and to comply with other legal requirements that apply to such a change:

a. Operation of additional air pollution control equipment, which is addressed by a separate construction permit.

b. Firing of coal or a mix of coal from different suppliers.

c. Firing of the following materials in conjunction with firing of standard fuels, provided that such materials can be accommodated with the existing fuel handling system and the burners in the affected boiler, and that such materials do not make up more than 10 percent by weight of the fuel supply to the boiler on a quarterly basis:

i. Other process wastes generated at the source in addition to used oil and boiler cleaning residue.

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

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

7.2.12 Compliance Procedures

a. i. Compliance with the opacity limits of Conditions 7.2.4(a)(iii) and (b) (20 percent opacity) is addressed by the average opacity calculated from 6-minute periods of opacity measurements from the continuous opacity monitoring system operated in accordance with the requirements of Condition 7.2.8(a) and the recordkeeping requirements of Conditions 7.2.9.

ii. Notwithstanding Condition 7.2.12(a)(i) above, should the Permittee choose to rely on 35 IAC 212.122(b) to allow opacity greater than 20 percent (6-minute average) from an affected boiler, the Permittee shall do the following:

A. Maintain records for the affected boiler of short-term opacity data, that is, either a continuous chart recording of measured opacity, a record of discrete measurements of opacity taken no more than 10 seconds apart, or a record of 1-minute average opacity data determined from six or more data points equally spaced during each minute period, to determine whether opacity from the boiler exceeded 20 percent opacity.

B. Have the capability to review such short-term opacity data for the affected boiler to identify:

I. Any hour in which opacity exceeded 20 percent, and then, in such hour: (1) the duration of opacity in

excess of 20 percent; (2) whether opacity ever exceeded 40 percent; and (3) whether the duration of opacity in excess of 20 percent was more than 3 minutes in aggregate.

II. For the affected boiler, whether opacity in excess of 20 percent occurred in more than three hours in a 24 hour period.

C. For other emission units at the source, have the ability to review short-term opacity data representative of such units during hours in which the opacity of the affected boiler on a short-term basis may exceed 20 percent, to confirm that the opacity of any other unit at the source did not exceed 20 percent in any minute during an hour in which the short-term opacity of the affected boiler may have exceeded 20 percent.

D. In the reports required by Condition 7.2.10-2(e), confirm that the relevant short-term opacity data, reviewed as above, shows that the terms of 35 IAC 212.122(b) are satisfied, when 35 IAC 212.122(b) is relied upon as the basis to claim that an affected boiler did not violate Condition 7.2.4(b) even though opacity on a 6-minute average exceeded 20 percent.

D. Notify the Illinois EPA at least 15 days prior to changing its procedures associated with reliance on 35 IAC 212.122(b), to allow the Illinois EPA to review the new recordkeeping and data handling practices planned by the Permittee.

b. Compliance with PM emission limits of Conditions 7.2.4(a)(ii) and (c) is addressed by continuous opacity monitoring in accordance with Condition 7.2.8(a), PM testing in accordance with Condition 7.2.7, and the recordkeeping required by Conditions 7.2.9.

c. Compliance with the SO_2 emission limits of Condition 7.2.4(a)(ii) and (d) is addressed by continuous emission monitoring in accordance with Condition 7.2.8(b) and the recordkeeping required by Condition 7.2.9(d).

d. Compliance with the CO emission limitation of Condition 7.2.4(e) is addressed by the required work

practices in Condition 7.2.6(a), emission testing in accordance with Conditions 7.2.7 and the recordkeeping required by Condition 7.2.9.

e. Compliance with NOx emission limits of Conditions 7.2.5(b)(ii), if applicable, and 7.2.4(f) is addressed by continuous emissions monitoring in accordance with Condition 7.2.8(c) and the recordkeeping required by Condition 7.2.9.

f. Compliance with the work practices required by Condition 7.2.6(a) is addressed by the recordkeeping required by Condition 7.2.9.

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

7.3 Coal Handling Equipment

7.3.1 Description

The Permittee transfers and stores coal in a series of operations, including truck unloading, various conveyor belts (with associated hoppers, diverters, and transfer points), storage piles (with stackers and feeders), and bunkers. These operations first handle coal, as supplied by the mine and then, after the crushers, coal that has been processed at the source by the coal processing equipment (See Section 7.4). Particulate matter (PM) emissions associated with these operations are controlled by various measures including the moisture content of the coal, enclosures and covers, and dust collection devices.

7.3.2 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:

<u>Coal Receiving Operations</u>

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

<u>Coal Crushing House</u>

Coal Transfer Conveyors
Dust Suppressant Application System, Enclosures and Covers

<u>Coal Storage Operations</u>

Outdoor Storage Piles
Coal Transfer Conveyors
Coal Storage Bunkers
Coal Silo
Controls - None

7.3.3 Applicability Provisions

a. The "affected operations" for the purpose of these unit-specific conditions, are the emission units that are used solely for the purpose of transferring coal or other solid fuel from one location to another or for storage of coal or other solid fuel, without changing the size of the fuel, e.g., by crushing or screening, as described in Conditions 7.3.1 and 7.3.2.

7.3.4 Applicable Emission Standards

a. The affected operations shall comply with the standard in Condition 5.2.2(a), which generally addresses visible emissions of fugitive particulate matter, as

defined by 35 IAC 211.2490, pursuant to 35 IAC 212.301.

b. The affected operations shall comply with the standard, i.e., 30 percent opacity, in Condition 5.2.2(b), which generally addresses the opacity of the emission of smoke or other particulate matter, pursuant to 35 IAC 212.123.

7.3.5 Non-Applicability of Regulations of Concern

a. The affected operations are not subject to 35 IAC 212.321 or 212.322 because of the disperse nature of the operations, as generally addressed by 35 IAC 212.323.

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

a. i. The Permittee shall implement and maintain control measures for the affected operations, such as enclosure, natural surface moisture, application of dust suppressant, and use of dust collection devices, that minimize visible emissions of particulate matter and provide assurance of compliance with the applicable emission control requirements in Conditions 7.3.4 and 7.3.6(b), pursuant to Section 39.5(7)(a) of the Act.

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

b. i. A. The fuel silos associated with Boiler 123 (Silos 1 through 4) shall each be controlled with a baghouse (fabric filter) to control PM emissions. [T1]

B. Good air pollution control practices shall be employed to minimize the emissions of PM from storage piles. [T1]

ii. PM emissions from the fuel silos associated with Boiler 123 (Silos S1 through S4) shall each not exceed 0.137 lb/hr. [T1]

Note: The above requirements were established in Construction Permit 00070030.

7.3.7 Opacity Testing Requirements

a. i. The Permittee shall have the opacity of the emissions from the affected operations during representative weather and operating conditions determined by a qualified observer in accordance

with USEPA Test Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.

A. For each affected operation, testing shall be conducted at least annually. For this purpose, testing shall first be conducted within three months after the effective date of this Condition 7.3.7(a).

B. Upon written request by the Illinois EPA, such testing shall be conducted for specific affected operation(s) within 45 calendar days of the request or on the date agreed upon by the Illinois EPA, whichever is later.

ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 10.0 percent.

iii. A. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).

B. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.

iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.

v. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:

A. Date and time of testing.

B. Name and employer of qualified observer.

C. Copy of current certification.

D. Description of observation condition, including recent weather.

E. Description of the operating conditions of the affected operations.

F. Raw data.

G. Opacity determinations.

H. Conclusions.

7.3.8 Inspection Requirements

a. The Permittee shall perform inspections of the affected operations on at least a monthly basis, including associated control measures, while the affected operations are in use, to confirm compliance with the requirements of Condition 7.3.6(a). These inspections shall be performed with personnel not directly involved in the day-to day operation of the affected operations and may be scheduled so that only a number of affected operations are reviewed during each inspection, provided however, that all affected operations that are in routine service shall be inspected at least once during each calendar month, [Section 39.5(7)(a) and (d) of the Act.]

b. The Permittee shall perform detailed inspections of the dust collection equipment for the affected operations at least every 15 months while the processes are out of service, with an initial inspection performed before any maintenance and repair activities are conducted during the period the process is out of service and a follow-up inspection performed after any such activities are completed. [Section 39.5(7)(a) and (d) of the Act]

7.3.9 Recordkeeping Requirements

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

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

i. File(s) containing the following information for the affected operations, with supporting information, which information shall be kept up to date:

A. Information related to any dust collection equipment associated with the affected operations, including the design control efficiency or performance specifications and maximum design particulate matter emissions, gr/dscf.

B. The maximum operating capacity of each affected operation, (ton/hour).

b. i. The Permittee shall maintain a record, which shall be kept up to date, of the control measures currently being implemented for the

affected operations 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 control measures are sufficient to assure compliance with the emission limitations in Condition 7.3.6(b), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. Except as addressed by Condition 7.3.9(a)(i), this demonstration shall be developed using emission factors for uncontrolled PM emissions, efficiency of control measures, and controlled PM emissions published by USEPA.

iii. Copies of these records shall be submitted to the Illinois EPA in accordance with Condition 5.6.2(d).

c. The Permittee shall maintain 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 fuel silos, by type of fuel (tons/month and tons/year).

d. The Permittee shall maintain records of the following for the inspections required by Condition 7.3.8:

i. For the inspections required by Condition 7.3.8(a) for each affected operation:

A. Date and time the inspection was performed and name(s) of inspection personnel.

B. The observed condition of the control measures for each affected operation, including the presence of any visible emissions.

C. A description of any maintenance or repair associated with established control measures that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be

performed or no longer appears to be required.

D. A summary of the observed implementation or status of actual control measures, as compared to the established control measures.

ii. For the inspections required by Condition 7.3.8(b) for the dust collection equipment for affected operations:

A. Date and time the inspection was performed and name(s) of inspection personnel.

B. The observed condition of the equipment.

C. A summary of the maintenance and repair that is to be or was conducted on the equipment.

D. A description of any maintenance or repair that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.

E. A summary of the observed condition of the equipment as related to its ability to reliably and effectively control emissions.

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 any applicable emissions standards, as listed in Condition 7.3.4, or the PM emission limits in Condition 7.3.6(b) may have been violated during the incident, with an estimate of the amount of any additional or excess PM emissions (lbs) from the incident, with supporting explanation.

f. The Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9 for the affected operations that it conducts or that are conducted on its behest by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements if conducted pursuant to Condition 7.3.7(a), or otherwise the identity of the observer, a description of the measurements that were made, the operating condition of the affected operations, the observed opacity, and copies of the raw data sheets for the measurements.

g. To demonstrate compliance with Condition 7.3.6(b), the Permittee shall keep records for PM emissions of the fuel silos PM emissions (tons/month and tons/year), based on the records, with supporting calculations.

7.3.10 Reporting Requirements

a. Reporting of Deviations

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

i. The Permittee shall provide the following notifications and reports to the Illinois EPA concerning incidents when operation of continued with excess emissions, including continued operation during malfunction or breakdown of equipment.

A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity from an affected operation exceeds or may have exceeded the applicable opacity standard for three or more 6-minute averaging periods. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds or may have exceeded the applicable standard for one or two 6-minute averaging periods, the Permittee need only report the incident in accordance with Condition 7.3.10(a)(iii).)

B. Upon conclusion of each such incident for which notification is required, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed description of the incident and its cause(s), an explanation why continued operation of an affected operation was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected operation was taken out of service.

ii. Notification within 30 days for operation of an affected operation that did not fulfill the applicable requirements in Conditions 7.3.6(a) that continued for more than 12 operating hours from the time that it was identified. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.3.9(e).

iii. A. Notification with the next deviation quarterly reports required by Condition 7.1.10-1(a)(iv) for other deviations not addressed by Conditions 7.3.10(a)(i) and (ii), including deviations from applicable emission standards, inspection requirements and recordkeeping requirements.

B. With the deviation quarterly report, the Permittee shall also address deviations that occurred during the reporting period quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected operations without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

a. Handling of solid fuels other than coal.

b. Operation of additional dust suppressant systems.

c. Operation of additional dust collection equipment.

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

7.3.12 Compliance Procedures

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

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

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

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

7.4 Coal Processing Equipment

7.4.1 Description

The Permittee prepares or processes coal for use as fuel in its boilers with crushers that reduce the size of the coal. Associated particulate matter (PM) emissions are controlled by various control measures including moisture content of the coal, application of dust suppressant to the coal, and enclosures and covers.

7.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Crusher House	Coal Crushing Operation	Enclosures and Covers, and Dust Suppressant Application

7.4.3 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 7.4.1 and 7.4.2.

7.4.4 Applicable Emission Standards

a. The affected processes shall comply with the standard in Condition 5.2.2(a), which addresses visible emissions of fugitive particulate matter, as defined by 35 IAC 211.2490, from the affected processes, pursuant to 35 IAC 212.301.

b. The affected processes shall comply with the standard, i.e., 30 percent opacity, in Condition 5.2.2(b), which 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 shall comply with 35 IAC 212.321(a), which provides that:

   No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c) of 35 IAC 212.321 [35 IAC 212.321(a)]. (See also Attachment 1)

7.4.5 Non-Applicability of Regulations of Concern

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 assurance of compliance with the applicable emission standards in Condition 7.4.4 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 the records required by Condition 7.4.9(b)(i).

7.4.7 Opacity and Emission Testing Requirements

a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative weather and operating conditions determined by a qualified observer in accordance with USEPA Test Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.

A. For each affected process, testing shall be conducted at least annually. For this purpose, testing shall first be conducted within three months after the effective date of this Condition 7.4.7(a).

B. Upon written request by the Illinois EPA, such testing shall be conducted for specific affected process(es) within 45 calendar days of the request or on the date agreed upon by the Illinois EPA, whichever is later.

ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 10.0 percent.

iii. A. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).

B. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.

iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.

v. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:

A. Date and time of testing.

B. Name and employer of qualified observer.

C. Copy of current certification.

D. Description of observation condition, including recent weather.

E. Description of the operating conditions of the affected processes.

F. Raw data.

G. Opacity determinations.

H. Conclusions.

b. i. Within 90 days of a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of the affected processes, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7)(d) of the Act.

ii. A. Testing shall be conducted using appropriate USEPA Reference Test Methods, including Method 5 for PM emissions.

B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.

iii. The Permittee shall submit a test plan to the Illinois EPA at least 60 days prior to testing, which plan shall include the information specified by Condition 8.6.2.

iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the

test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.

v. The Permittee shall expeditiously submit complete Final Report(s) for required emission testing to the Illinois EPA, no later than 90 days after the date of testing. These reports shall include the information specified in Condition 8.6.3 and the following information:

A. A summary of results.

B. Detailed description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

C. Detailed description of the operating conditions of the affected process during testing, including operating rate (tons/hr) and the control measures being used.

D. Detailed data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

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

7.4.8 Inspection Requirements

a. The Permittee shall perform inspections of each affected process on at least a weekly basis, including associated control measures, to confirm compliance with the requirements of Condition 7.4.6(a). These inspections shall be performed with personnel not directly involved in the day-to day operation of the affected processes. [Sections 39.5(7)(a) and (d) of the Act]

b. The Permittee shall perform detailed inspections of the dust collection equipment for affected processes at least every 15 months while the processes are out of service, with an initial inspection performed before any maintenance and repair activities are conducted during the period the process is out of service and a follow-up inspection performed after any such activities are completed. [Sections 39.5(7)(a) and (d) of the Act].

7.4.9 Recordkeeping Requirements

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

a. The Permittee shall keep the following records:

i. The following information for the affected process, with supporting information, which shall be kept up to date:

A. Information related to the dust collection equipment associated with the affected processes, including the performance specifications for filter material and maximum design particulate matter emissions, gr/dscf.

B. The maximum operating capacity of each element of the affected process, (ton/hr).

ii. Operating log(s) for the affected process, which shall include information for any incident in which the operation of the process continued during malfunction or breakdown, including: date, time, and duration; a description of the incident; whether emissions exceeded or may have exceeded any applicable standard; a description of the corrective actions taken to reduce emissions and the duration of the incident; and a description of the preventative actions taken.

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

b. i. The Permittee shall maintain a record, which shall be kept up to date, of the control measures currently being implemented for the affected processes pursuant to Condition 7.4.6(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 control measures are sufficient to assure compliance with Condition 7.4.4(c) at the maximum process weight rate at which each affected process can be operated (tons coal/hour), with supporting emission calculations and documentation for the emission factors and the efficiency of the control

measures being relied upon by the Permittee. Except as addressed by Condition 7.4.9(a)(i) or testing of an affected process is conducted in accordance with Condition 7.4.7(b), this demonstration shall be developed using emission factors for uncontrolled PM emissions, efficiency of control measures, and controlled PM emissions published by USEPA.

iii. Copies of these records shall be submitted to the Illinois EPA in accordance with Condition 5.6.2(d).

c. The Permittee shall maintain records of the following for the inspections required by Condition 7.4.8:

i. For the inspections required by Condition 7.4.8(a) for each affected process:

A. Date and time the inspection was performed and name(s) of inspection personnel.

B. The observed condition of the control measures for each affected process, including the presence of any visible emissions.

C. A description of any maintenance or repair associated with established control measures that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.

D. A summary of the observed implementation or status of actual control measures, as compared to the established control measures.

ii. For the inspections required by Condition 7.4.8(b) for the dust collection equipment for affected processes:

A. Date and time the inspection was performed and name(s) of inspection personnel.

B. The observed condition of the equipment.

C. A summary of the maintenance and repair that is to be or was conducted on the equipment.

D. A description of any maintenance or repair that is recommended as a result of the

inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.

E. A summary of the observed condition of the equipment as related to its ability to reliably and effectively control emissions.

d. The Permittee shall maintain records of the following for each incident when any affected process operated without the established control measures:

i. The date of the incident and identification of the affected process(es) that were involved.

ii. A description of the incident, including the established control measures that were not present or implemented; the established control measures that were present, if any; other control measures or mitigation measures that were implemented, if any; and the magnitude of the PM emissions during the incident.

iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.

iv. The length of time after the incident was identified that the affected process(es) continued to operate before established control measures were in place or the operations were shutdown (to resume operation only after established control measures were in place) and, if this time was more than one hour, an explanation why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.

v. The estimated total duration of the incident, i.e., the total length of time that the affected process(es) ran without established control measures and the estimated amount of coal processed during the incident.

vi. A discussion of the probable cause of the incident and any preventative measures taken.

vii. A discussion whether any applicable emission standards, as listed in, Condition 7.4.4, may have been violated during the incident, with supporting explanation.

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. The Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9 for the affected processes that it conducts or that are conducted on its behest by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements if conducted pursuant to Condition 7.4.7(a), or otherwise the identity of the observer, a description of the measurements that were made, the operating condition of the affected process, the observed opacity, and copies of the raw data sheets for the measurements.

7.4.10 Reporting Requirements

a. Reporting of Deviations

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

i. The Permittee shall provide the following notifications and reports to the Illinois EPA concerning incidents when operation continued with excess emissions, including continued operation of an affected process during malfunction or breakdown of equipment.

A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity from an affected process exceeds or may have exceeded 30 percent for three or more 6-minute averaging periods. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds or may have exceeded 30 percent for one or two 6-minute averaging periods, the Permittee need only report the incident in accordance with Condition 7.4.10(a)(iii).)

B. Upon conclusion of each such incident for which notification is required, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed description of the incident and its cause(s), an explanation why continued operation was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected operation was taken out of service.

ii. Notification within 30 days for operation of an affected process that was not in compliance with applicable requirements in Conditions 7.4.6(a) that continued for more than 12 operating hours from the time that it was identified. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.4.9(e).

iii. A. Notification with the next deviation report required by Condition 7.1.10-1(a)(iv) for other deviations not addressed by Conditions 7.4.10(a)(i) and (ii), including deviations from applicable emission standards, inspection requirements and recordkeeping requirements.

B. With the deviation report, the Permittee shall also address deviations that occurred during the reporting period that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

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

35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

a. Handling of solid fuels other than coal.

b. Operation of additional dust suppressant systems.

c. Operation of additional dust collection equipment.

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

7.4.12 Compliance Procedures

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

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

c. Compliance with Condition 7.4.6(a) is addressed by testing, inspection, and recordkeeping required by Conditions 7.4.7, 7.4.8, and 7.4.9, respectively.

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

7.5 Ash Equipment

7.5.1 Description

The Permittee operates ash removal systems that handle and store ash collected at the coal-fired boilers.

A pug mill is used to combine dry fly ash with wet sludge from the scrubber on Boiler 4, in preparation for landfill disposal, when there is not a market for the dry fly ash material. Associated particulate matter (PM) emissions are controlled by various control measures including moisture content of the fly ash, and enclosures and covers.

7.5.2 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:

Emission Unit	Description	Control Equipment
Ash 1	Fly Ash Conveyor	Baghouse
Silo 6 (Unit 123)	Fly Ash Silo and Loadout	Baghouse
Silo 7 (Unit 123)	Bottom Ash Silo and Loadout	Baghouse
Pug Mill (Unit 4)	Fly Ash/Scrubber Sludge Mixing Operation	Moisture Content, Enclosures and Covers

7.5.3 Applicability Provisions

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

7.5.4 Applicable Emission Standards

a. The affected processes shall comply with the standard, i.e. 30 percent opacity, 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 shall comply with 35 IAC 212.321(a), which provides that:

   No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which,

either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c) [35 IAC 212.321(a)] (See also Attachment 1.)

7.5.5 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected processes not being subject to the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR Part 60, Subparts A and OOO, because the affected processes do not meet the definition of a nonmetallic mineral processing plant because there is no equipment used to crush or grind ash.

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

a. i. The Permittee shall implement and maintain control measures for the affected processes, including enclosure and filtration-type dust collection devices, that minimize visible emissions of particulate matter and provide assurance of compliance with the applicable emission control requirements in Conditions 7.5.4, and 7.5.6(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 the records required by Condition 7.5.9(b)(i).

b. i. The ash silos (Silos 6 and 7) associated with Boiler 123 shall each be controlled with a baghouse (fabric filter) to control PM emissions. [T1]

ii. PM emissions from the ash silos associated with Boiler 123 (Silos 6 and 7) shall each not exceed 0.645 lb/hr. [T1]

Note: The above requirements were established in Construction Permits 00070030.

7.5.7 Opacity and Emission Testing Requirements

a. i. The Permittee shall have the opacity of the emissions from the affected processes during representative weather and operating conditions determined by a qualified observer in accordance with USEPA Test Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.

A. For each affected process, testing shall be conducted at least annually. For this purpose, testing shall first be conducted within three months after the effective date of this Condition 7.5.7(a).

B. Upon written request by the Illinois EPA, such testing shall be conducted for specific affected process(es) within 45 calendar days of the request or on the date agreed upon by the Illinois EPA, whichever is later.

ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 5.0 percent.

iii. A. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).

B. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.

iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.

v. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:

A. Date and time of testing.

B. Name and employer of qualified observer.

C. Copy of current certification.

D. Description of observation condition, including recent weather.

E. Description of the operating conditions of the affected processes.

F. Raw data.

G. Opacity determinations.

H. Conclusions.

b. i. Within 90 days of a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of the affected processes, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7)(d) of the Act.

ii. A. Testing shall be conducted using appropriate USEPA Reference Test Methods, including Method 5 for PM emissions.

B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.

iii. The Permittee shall submit a test plan to the Illinois EPA at least 60 days prior to testing, which plan shall include the information specified by Condition 8.6.2.

iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.

v. The Permittee shall expeditiously submit complete Final Report(s) for required emission testing to the Illinois EPA, no later than 90 days after the date of testing. These reports shall include the information specified in Condition 8.6.3 and the following information:

A. A summary of results.

B. Detailed description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

C. Detailed description of the operating conditions of the affected process during testing, including operating rate (tons/hr) and the control measures being used.

D. Detailed data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

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

7.5.8 Inspection Requirements

a. The Permittee shall perform inspections of the affected processes on at least a weekly basis, including associated control measures, while the affected processes are in use, to confirm compliance with the requirements of Condition 7.5.6(a). These inspections shall be performed by personnel who are not directly involved in the day-to day operation of the affected processes. [Sections 39.5(7)(a) and (d) of the Act]

b. The Permittee shall perform detailed inspections of the dust collection equipment for affected processes at least every nine months while the processes are out of service, with an initial inspection performed before any maintenance and repair activities are conducted during the period the process is out of service and a follow-up inspection performed after any such activities are completed. [Sections 39.5(7)(a) and (d) of the Act]

7.5.9 Recordkeeping Requirements

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

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

i. File(s) containing the following information for the affected processes, with supporting information, which information shall be kept up to date:

A. Information related to the dust collection equipment associated with the affected processes, including the performance specifications for filter material and maximum design particulate matter emissions, gr/dscf.

B. The maximum operating capacity of each affected process (ton/hour).

ii. Maintenance and repair log(s) for the air pollution control equipment associated with the affected processes, including dust suppressant

application systems, which log(s) shall list the activities performed on each item of equipment or system, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

b. i. The Permittee shall maintain a record, which shall be kept up to date, of the control measures currently being implemented for the affected processes pursuant to Condition 7.5.6(a). These control measures are referred to as the "established control measures" in this subsection of this permit.

ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the above established control measures are sufficient to assure compliance with Condition 7.5.4(c) at the maximum process weight rate at which each affected process can be operated (tons ash/hour) and with the PM emission limitations in Condition 7.5.6(b) (lb /hour and ton/yr), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. Except as addressed by Condition 7.5.9(a)(i) or testing of an affected process is conducted in accordance with Condition 7.5.7(b), this demonstration shall be developed using emission factors for uncontrolled PM emissions, efficiency of control measures, and controlled PM emissions published by USEPA.

iii. Copies of these records shall be submitted to the Illinois EPA in accordance with Condition 5.6.2(d).

c. The Permittee shall maintain a record of the amount of fly ash sent to the fly ash silos, (tons/month and tons/year).

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

i. For the inspections required by Condition 7.5.8(a) for each affected process:

A. Date and time the inspection was performed and name(s) of inspection personnel.

B. The observed condition of the control measures for each affected process, including the presence of any emissions or accumulations of fly ash in the vicinity of the process.

C. A description of any maintenance or repair associated with established control measures that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.

D. A summary of the observed implementation or status of actual control measures, as compared to the established control measures.

ii. For the inspections required by Condition 7.5.8(b) for the dust collection equipment for affected processes:

A. Date and time the inspection was performed and name(s) of inspection personnel.

B. The observed condition of the equipment.

C. A summary of the maintenance and repair that is to be or was conducted on the equipment.

D. A description of any maintenance or repair that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.

E. A summary of the observed condition of the equipment as related to its ability to reliably and effectively control emissions.

e. The Permittee shall maintain records of the following for each incident when any affected process operated without the established control measures:

i. The date of the incident and identification of the affected process(es) that were involved.

ii. A description of the incident, including: the established control measures that were not present or implemented; the established control measures that were present, if any; other control measures or mitigation measures that were implemented, if any; and the magnitude of the PM emissions during the incident.

iii. The time at and means by which the incident was identified, e.g., scheduled inspection or observation by operating personnel.

iv. The length of time after the incident was identified that the affected process(es) continued to operate before established control measures were in place or the operations were shutdown (to resume operation only after established control measures were in place) and, if this time was more than one hour, an explanation why this time was not shorter, including a description of any mitigation measures that were implemented during the incident.

v. The estimated total duration of the incident, i.e., the total length of time that the affected process(es) ran without established control measures and the estimated amount of material handled during the incident.

vi. A discussion of the probable cause of the incident and any preventative measures taken.

vii. A discussion whether applicable emission standards, as listed in Condition 7.5.4, or the PM emission limits in Condition 7.5.6(b) may have been violated during the incident, with an estimate of the amount of any additional or excess PM emissions (lbs) and supporting explanation.

f. The Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9 for the affected processes that it conducts or that are conducted on its behest by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements if conducted pursuant to Condition 7.4.7(a), or otherwise the identity of the observer, a description of the measurements that were made, the operating condition of the affected process, the observed opacity, and copies of the raw data sheets for the measurements.

g. To demonstrate compliance with Condition 7.5.6(b), the Permittee shall keep records for PM emissions of the ash silos associated with Boiler 123 (Silos 6 and 7) (tons/month and tons/year) based on the above records, with supporting calculations.

7.5.10 Reporting Requirements

a. Reporting of Deviations

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

i. The Permittee shall provide the following notifications and reports to the Illinois EPA concerning incidents when operation continued with excess emissions, including continued operation of an affected process during malfunction or breakdown of equipment.

   A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity from an affected process exceeds or may have exceeded 30 percent for three or more 6-minute averaging periods. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds or may have exceeded 30 percent for one or two 6-minute averaging periods, the Permittee need only report the incident in accordance with Condition 7.5.10(a)(iii).)

   B. Upon conclusion of each such incident for which notification is required, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed description of the incident and its cause(s), an explanation why continued operation was necessary, the length of time during which operation continued under such conditions, the measures taken by the Permittee to minimize and correct deficiencies with chronology, and when the repairs were completed or when the affected operation was taken out of service.

ii. Notification within 30 days for operation of an affected process that was not in compliance with applicable requirements in Conditions 7.5.6(a) that continued for more than 12 operating hours from the time that it was identified. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.5.9(e).

iii. A. Notification with the next deviation report required by Condition 7.1.10-

1(a)(iv) for other deviations not addressed by Conditions 7.5.10(a)(i) and (ii), including deviations from applicable emission standards, inspection requirements and recordkeeping requirements.

B. With the deviation report, the Permittee shall also address deviations that occurred during the reporting period that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.

7.5.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected processes without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, 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, as recognized in a Construction Permit for such system or equipment.

7.5.12 Compliance Procedures

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

b. Compliance with Conditions 7.5.6(a) is addressed by the testing, inspection, and recordkeeping required by Conditions 7.4.7, 7.4.8, and 7.4.9, respectively.

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

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

7.6 Limestone Handling Equipment

7.6.1 Description

The Permittee operates limestone handling and storage equipment that handles limestone for the coal-fired boilers' SO_2 control systems. The original facilities were was installed with Boiler 4 and includes a ball mill in which limestone is ground to a powder for use in the SO_2 scrubber for that boiler. Separate limestone handling and storage facilities were installed with Boiler 123, to handle the limestone that is injected into the bed of this fluidized bed boiler for control of SO_2 emissions. Particulate matter (PM) emissions from these facilities are controlled by various control measures including moisture content of the limestone, enclosures and covers, and dust control equipment.

7.6.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Equipment
Limestone Handling	Receiving and Conveyors	Enclosure and Covers
Limestone Storage	Storage Silos	Enclosure and Filter System
Ball Mill	Grinding Operation	Moisture Content, Enclosures and Covers

7.6.3 Applicability Provisions

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

ii. Certain affected units, as follows, for which construction or modification commenced after August 31, 1983 are also "affected facilities" for purposes of the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subpart OOO, pursuant to 40 CFR 60.670(a) and 60.671. This is because this source processes limestone, a nonmetallic mineral, in a grinding mill, as addressed by Section 7.7 of this permit. These "affected facilities" are subject to applicable requirements of the NSPS, 40 CFR 60 Subpart OOO and related requirements in the NSPS, 40 CFR 60 Subpart A, General Provisions.

A. Bucket elevators and belt conveyors.

B. Storage Bins.

C. Grinding Mills

D. Enclosed truck or railcar loading stations.

7.6.4 Applicable Emission Standards

a. The affected units 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 units, pursuant to 35 IAC 212.301.

b. The affected units shall comply with the standard, i.e., 30 percent opacity, in Condition 5.2.2(b), which addresses the opacity of the emission of smoke or other particulate matter from the units, pursuant to 35 IAC 212.123.

c. The affected units are subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c). (See also Attachment 1.) [35 IAC 212.321(a)]

d. The affected units that are subject to the NSPS, 40 CFR 60 Subpart OOO, shall comply with the following standards pursuant to 40 CFR 60.672, except during periods of startup, shutdown and malfunction, as defined in 40 CFR 60.2, pursuant to 40 CFR 60.11(c) and 60.672.

i. Fugitive emissions, i.e., emissions that are not collected by a control system and are released at the point of generation, from transfer point on belt conveyors and from other affected facilities shall not exceed 10 percent opacity, pursuant to 40 CFR 60.672(b).

ii. Stack emissions, i.e., emissions discharged through a control device, from transfer point on belt conveyors and from other affected facilities shall comply with the following limits, pursuant to 40 CR 60.672(a)(1) and (2):

A. Particulate matter emissions shall not exceed 0.05 g/dscm.

B. Opacity shall not exceed 7 percent, unless emission are discharged using a wet scrubbing control device.

iii. If a transfer point on a belt conveyor or other affected facility is enclosed in a building, then the enclosed affected facility must comply

with the applicable limits above or there shall be no visible emissions from the building except from vents or stacks, which shall comply with the applicable limits for stack emissions, pursuant to 40 CFR 60.672(e).

Note: These standards do not apply to truck dumping of limestone into an affected unit, pursuant to 40 CFR 60.672(c).

7.6.5 Non-Applicability of Regulations of Concern

None

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

a. i. The Permittee shall implement and maintain control measures for the affected units, such as enclosure, natural surface moisture, water spray, application of dust suppressant and dust collection devices, that minimize visible emissions of particulate matter and provide assurance of compliance with the applicable emission control requirements in Conditions 7.6.4 and 7.6.6(b), pursuant to Section 39.5(7)(a) of the Act.

ii. The Permittee shall operate and maintain each affected units with the control measures identified in the records required by Condition 7.6.9(b)(i).

b. i. A. The PM emissions from Silo 5 (the limestone silo associated with Boiler 123) shall be controlled with a baghouse (fabric filter). [T1]

B. Good air pollution control practices shall be employed to minimize the emissions of PM from limestone storage piles. [T1]

ii. PM emissions from the limestone Silo 5 shall not exceed 0.137 lb/hr. [T1]

Note: The above requirements were established in Construction Permit 00070030.

7.6.7 Opacity and Emission Testing Requirements

a. i. The Permittee shall have the opacity of the emissions from the affected units during representative weather and operating conditions determined by a qualified observer in accordance with USEPA Test Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.

A. For each affected unit, testing shall be conducted at least annually. For this purpose, testing shall first be conducted within three months after the effective date of this Condition 7.6.7(a).

B. Upon written request by the Illinois EPA, such testing shall be conducted for specific affected units within 45 calendar days of the request or on the date agreed upon by the Illinois EPA, whichever is later.

ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 10.0 percent.

iii. A. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).

B. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.

iv. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.

v. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:

A. Date and time of testing.

B. Name and employer of qualified observer.

C. Copy of current certification.

D. Description of observation condition, including recent weather.

E. Description of the operating conditions of the affected units.

F. Raw data.

G. Opacity determinations.

H. Conclusions.

b. i. Within 90 days of a written request from the Illinois EPA, the Permittee shall have the PM emissions at the stacks or vents of the affected units, as specified in such request, measured during representative operating conditions, as set forth below, pursuant to Section 39.5(7)(d) of the Act.

ii. A. Testing shall be conducted using appropriate USEPA Reference Test Methods, including Method 5 for PM emissions.

B. Compliance may be determined from the average of three valid test runs, subject to the limitations and conditions contained in 35 IAC Part 283.

iii. The Permittee shall submit a test plan to the Illinois EPA at least 60 days prior to testing, which plan shall include the information specified by Condition 8.6.2.

iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.

v. The Permittee shall expeditiously submit a complete Test Report to the Illinois EPA, no later than 90 days after the date of testing. This report shall include the information specified in Condition 8.6.3 and the following information:

A. A summary of results.

B. Detailed description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

C. Detailed description of the operation of the affected operations during testing, including operating rate (tons/hr) and the control measures being used.

D. Detailed data and calculations, including copies of all raw data sheets and records

of laboratory analyses, sample calculations, and data on equipment calibration

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

7.6.8 Inspection Requirements

a. The Permittee shall perform inspections of affected units on at least a bi-weekly basis, including associated control measures, while the affected units are in use, to confirm compliance with the requirements of Condition 7.6.6(a). These inspections shall be performed by personnel who are not directly involved in the day-to-day operation of the affected units and may be scheduled so that only a number of affected units are reviewed during each inspection, provided however, that all affected units that are in routine service shall be inspected at least once during each two-week period. [Sections 39.5(7)(a) and (d) of the Act]

b. The Permittee shall perform detailed inspections of the dust collection equipment for affected units at least every 15 months while the units are out of service, with an initial inspection performed before any maintenance and repair activities are conducted during the period the unit is out of service and a follow-up inspection performed after any such activities are completed. [Sections 39.5(7)(a) and (d) of the Act]

7.6.9 Recordkeeping Requirements

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

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

i. File(s) containing the following information for the affected units, with supporting information, which information shall be kept up to date:

A. Information related to the dust collection equipment associated with the affected units, including the design control efficiency or performance specifications for filter material and maximum design particulate matter emissions, gr/dscf.

B. The maximum operating capacity of each affected unit (ton/hour).

C. The aggregate capacity of the grinding equipment (ball mills).

D. A list identifying any affected unit that the Permittee does not consider to be an "affected facility" for purposes of the NSPS, with copies of supporting documentation for the date on which construction of the unit was commenced and its original design capacity.

ii. Maintenance and repair log(s) for the air pollution control equipment associated with the affected units, including dust suppressant application systems, that, at a minimum, shall list the activities performed on each item of equipment or facility, with date and description. (See also Condition 9.6.1, Control Equipment Maintenance Records.)

b. i. The Permittee shall maintain a record, which shall be kept up to date, of the control measures currently being implemented for the affected units pursuant to Condition 7.6.6(a). These control measures, as defined by the Permittee through these records, are referred to as the "established control measures" in this section of this permit.

ii. Accompanying this record, the Permittee shall maintain a demonstration that confirms that the above established control measures are sufficient to assure compliance with Condition 7.6.4(c) at the maximum process weight rate at which each affected unit can be operated (tons/hour), and with the applicable PM emission limitation in Condition 7.6.6(b), with supporting emission calculations and documentation for the emission factors and the efficiency of the control measures being relied upon by the Permittee. Except as addressed by Condition 7.6.9(a)(i) or testing of an affected unit is conducted in accordance with Condition 7.6.7(b), this demonstration shall developed using emission factors for uncontrolled PM emissions, efficiency of control measures, and controlled PM emissions published by USEPA.

iii. Copies of these records shall be submitted to the Illinois EPA in accordance with Condition 5.6.2(d).

c. The Permittee shall maintain a record of the amount of limestone received by the source (tons/month and tons/year).

d. The Permittee shall maintain records of the following for the inspections required by Condition 7.6.8:

i. For the inspections required by Condition 7.6.8(a) for each affected unit:

A. Date and time the inspection was performed and name(s) of inspection personnel.

B. The observed condition of the control measures for the affected unit, including the presence of any visible emissions.

C. A description of any maintenance or repair associated with established control measures that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.

D. A summary of the observed implementation of status of actual control measures, as compared to the established control measures.

ii. For the inspections required by Condition 7.6.8(b) for the dust collection equipment for the affected units:

A. Date and time the inspection was performed and name(s) of inspection personnel.

B. The observed condition of the equipment.

C. A summary of the maintenance and repair that is to be or was conducted on the equipment.

D. A description of any maintenance or repair that is recommended as a result of the inspection and a review of outstanding recommendations for maintenance or repair from previous inspection(s), i.e., whether recommended action has been taken, is yet to be performed or no longer appears to be required.

E. A summary of the observed condition of the equipment as related to its ability to reliably and effectively control emissions.

e. The Permittee shall maintain records of the following for each incident when any affected unit operated without the established control measures:

   i. The date of the incident and identification of the affected unit(s) that were involved.

   ii. A description of the incident, including the established control measures that were not present or implemented; the established control measures that were present, if any; 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 unit(s) continued to operate before established control measures were in place or the units 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 unit(s) ran without established control measures and the estimated amount of limestone handled during the incident.

   vi. A discussion of the probable cause of the incident and any preventative measures taken.

   vii. A discussion whether applicable emission standards, as listed in Condition 7.6.4, or the PM emission limits in Condition 7.6.6(b) may have been violated during the incident, with an estimate of the amount of any additional or excess PM emissions (lbs) from the incident, with supporting explanation.

f. The Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9 for the affected unit that it conducts or that are conducted on its behest by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements if conducted pursuant to Condition 7.6.7, or otherwise the identity of the observer, a description of the measurements that were made, the

operating condition of the affected unit, the observed opacity, and copies of the raw data sheets for the measurements.

g. To demonstrate compliance with Condition 7.6.6(b), the Permittee shall keep records for PM emissions of Silo 5 (tons/month and tons/year) based on the above records, with supporting calculations.

7.6.10 Reporting Requirements

a. Reporting of Deviations

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

i. The Permittee shall provide the following notifications and reports to the Illinois EPA concerning incidents when operation of an affected unit continued with excess emissions, including continued operation during malfunction or breakdown of equipment.

A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity from an affected unit exceeds or may have exceeded the applicable opacity standard for three or more 6-minute averaging periods. (Otherwise, if opacity during a malfunction or breakdown incident only exceeds or may have exceeded the applicable standard for no more than one or two 6-minute averaging periods, the Permittee need only report the incident in accordance with Condition 7.6.10(a)(iii).)

B. Upon conclusion of each such incident for which notification is required, the Permittee shall submit a written follow-up notice to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed description of the incident and its cause(s), an explanation why continued operation of the affected unit 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 unit was taken out of service.

ii. Notification within 30 days for operation of an affected unit that did not fulfill the applicable requirements in Conditions 7.6.6(a) that continued for more than 12 operating hours from the time that it was identified. Such notifications shall be accompanied by a copy of the records for the incident required by Condition 7.6.9(e).

iii. A. Notification with the quarterly reports required for Coal-fired Boiler 123 by Condition 7.1.10-2(a) for other deviations not addressed by Conditions 7.6.10(a)(i) and (ii), including deviations from the applicable PM emission standard, inspection requirements, and recordkeeping requirements.

B. With these reports, the Permittee shall also address deviations that occurred during the quarter that have been separately reported to the Illinois EPA, with a summary of such deviations. For this purpose, the Permittee need not resubmit the detailed information provided in the initial notifications and reports for such deviations.

7.6.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected units without prior notification to the Illinois EPA or revision of this permit, pursuant to Section 39.5(7)(a) and (l) of the Act. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a construction permit in a timely manner for any activity constituting a modification as defined by 40 CFR 52.21 or 35 IAC 203.207, as applicable, or for an activity for which a permit is required pursuant to 35 IAC 201.142.

a. Operation of additional dust suppressant systems.

b. Operation of additional dust collection equipment.

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

7.6.12 Compliance Procedures

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

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

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

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

7.7 Combustion Turbines

7.7.1 Description

The combustion turbines are process emission units used to provide electricity to meet peak power demands. The turbines are fired with natural gas, with distillate fuel oil as a backup fuel. The turbines were install pursuant to Construction Permit/PSD Approval 00070029.

7.7.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Control Measures
Turbine Unit 5	Natural Gas Fired Combustion Turbine Nominal 969 mmBtu/hr	Low NOx Combustion System When Gas Fired, Water Injection for Firing Backup Oil
Turbine Unit 6	Natural Gas Fired Combustion Turbine Nominal 969 mmBtu/hr	

7.7.3 Applicability Provisions

a. i. An "affected turbine" for the purpose of these unit-specific conditions is a turbine described in Conditions 7.7.1 and 7.7.2.

ii. The affected turbines are also affected facilities under the federal NSPS for Stationary Gas Turbines, 40 CFR 60 Subpart GG, because the construction of the affected turbines commenced after October 3, 1977 and the affected turbines have a heat input capacity greater than 10.7 gigajoules/hour (approximately 10 mmBtu/hr). As the turbines are also affected facilities subject toe the NSPS, the Permittee must comply with applicable requirements of the NSPS, 40 CFR 60 Subpart GG, and related requirements of 40 CFR 60, Subpart A, General Provisions, for the affected turbines.

7.7.4 Applicable Emission Standards

a. i. The affected turbines are subject to the NSPS for Stationary Gas Turbines, 40 CFR 60 Subpart GG.

ii. Each affected turbine is subject to 40 CFR 60.332(a)(1) and (b), which provide that, no owner or operator of an affected turbine shall cause to be discharged into the atmosphere from such gas turbine, any gases which contain nitrogen oxides (NOx) in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

Where:

STD = Allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = Manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the turbine. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = An allowance for fuel-bound nitrogen, which may be applicable for firing of oil, that is calculated from the nitrogen content of the fuel as follows:

Fuel-bound nitrogen (percent by weight)	F (NOx percent by volume)
$N \leq 0.015$	0
$0.015 < N \leq 0.1$	0.04 (N)
$0.1 < N \leq 0.25$	0.04 + 0.0067(N - 0.1)
$N > 0.25$	0.005

Where:

N = The nitrogen content of the fuel (percent by weight) determined in accordance with Condition 7.1.8.

iii. Each affected turbine is subject to 40 CFR 60.333, which provides that for a turbine subject to the NSPS either:

A. The owner or operator of the turbine shall not cause to be discharged into the atmosphere from the turbine any gases that contain sulfur dioxide (SO_2) in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis [40 CFR 60.333(a)], or.

B. The owner or operator of the turbine shall not burn in the turbine any fuel that contains sulfur in excess of 0.8 percent by weight [40 CFR 60.333(b)].

b. The affected turbines shall comply with the standard in Condition 5.2.2(b), i.e. 30 percent opacity, pursuant to 35 IAC 212.123.

c. Each affected turbine shall comply with 35 IAC 214.301, which provides that no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.

d. During each ozone control period (May 1 through September 30) of each year. The emissions of NOx from each affected turbine 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).

Note: Given the applicable emission determination method (See Condition 7.7.8), the calculated NOx emissions of the turbines for purposes of this standard may be different than the emissions determined for other purposes, e.g., Annual Emission Reports.

7.7.5 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected turbines not being subject to the requirements of 35 IAC 212.321 because, due to the nature of such unit, a process weight rate can not be set so that such rules can not reasonably be applied, pursuant to 35 IAC 212.323.

b. The affected turbines are not subject to 35 IAC 216.121 or 217.141 because the affected turbines are not fuel combustion units, as defined by 35 IAC 211.2470.

c. i. This permit is issued based on the affected turbines being gas and oil-fired peaking units, as specified in 40 CFR Part 75, so that continuous emission monitoring is not required for NOX. To maintain this status for an affected turbine, the three year rolling average annual capacity factor of the turbine shall not be greater than 10 percent, and the highest annual capacity factor shall not be greater than 20 percent in any one of the three averaging years.

ii. Should the operation of an affected turbine exceed the above requirements relating to the definition of a peaking unit in 40 CFR Part 75, the Permittee shall install the appropriate Continuous Emissions Monitoring System(s) on the turbine by December 31 of the following calendar year, as defined in 40 CFR 75, in order to remain in compliance with the provisions of the Acid Rain Program.

d. This permit is issued based on the affected turbines not being subject to the control requirements of 40 CFR 63, Subpart YYYY, the NESHAP for Stationary Combustion Turbines. This is because the turbines were constructed prior January 15, 2003 so that they are considered existing sources for purposes of this NESHAP. [40 CFR 63.6090(b)(4)]

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

a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected turbine in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]

b. i. Each affected turbine shall be equipped, operated and maintained with dry low-NOx combustors and water injection for controlling NOx emissions during natural gas firing and oil firing, respectively. [T1]

ii. The affected turbines shall utilize good combustion practices to reduce emissions of volatile organic material (VOM) and CO, which practices shall include routine maintenance and repair practices and other periodic assessments of the combustion performance of the affected turbines to reasonably minimize emissions. [T1]

c. i. The fuels fired in the affected turbines shall be only natural gas and distillate oil, as defined in 40 CFR 60.41c. [T1]

ii. The annual usage of fuel by the affected turbines shall not exceed 3,747 million standard cubic feet per year based on 901 Btu/scf LHV. Compliance with this limit shall be determined based on a running total of 12 months of data and considering one gallon of oil equivalent to 420 standard cubic feet, based on equivalent NOx emissions. [T1]

iv. The sulfur content of the distillate oil shall be limited to a maximum of 0.05 percent by weight. [T1]

v. Distillate oil shall only be fired as a backup fuel, that is: [T1]

A. For purposes of shakedown, evaluation of operation and emission testing of emission units; and

B. At other times when and to the extent that circumstances such as natural gas supply curtailment or breakdown of natural gas

delivery systems make it infeasible or impractical for the Permittee to fire natural gas in one or both of the affected turbines. However, this requirement does not require that the affected turbines, once operating on oil, be shutdown if natural gas becomes available for the unit during a day if the unit would then be restarted with natural gas on that same day.

d. Each affected turbine shall be operated in a manner consistent with good air pollution control practices to minimize emissions during startup and shutdown, including: [T1]

i. The Permittee shall manage the operation of the affected turbines to minimize multiple startups of the affected turbines in a single day, unless a the affected turbines are tripped off, and to provide adequate time to follow the procedures for normal startup of the affected turbines, except for requests for immediate delivery of power as would result from unexpected loss of a transmission line or other generating capacity.

ii. Operation in accordance with the manufacturer's written instructions or other written instructions developed and maintained by the Permittee that shall include at a minimum the following measures:

A. Review of operating parameters of the affected turbines during startup or shutdown as necessary to make adjustments to reduce or eliminate excess emissions.

B. Implementation of inspection and repair procedures for the affected turbines prior to attempting startup following repeated trips.

iii. The Permittee shall maintain each affected turbine in accordance with the manufacturer's written instructions or other written procedures developed and maintained by Permittee.

iv. These written procedures shall be reviewed at least annually and enhanced consistent with good air pollution control practice based on actual operating experience and performance of the affected turbines.

e. i. Emissions of carbon monoxide (CO) from each affected turbine shall not exceed 25 ppm by volume at 15 percent oxygen, except during startup, shutdown, or malfunction, as addressed by Condition 7.7.6(f). [T1]

ii. A. Emissions from the affected turbines shall not exceed the following limits: [T1]

Pollutant	Natural Gas Firing (per Unit)		Oil Firing (per Unit)		Annual Total for Both Units) (T/Y)
	Concentration (ppmvd)	Hourly (Lb/Hr)	Concentration (ppmvd)	Hourly (Lb/Hr)	
NOx	15 @ 15% O_2	67.0	42 @ 15% O_2	204.8	119
CO	25 @ actual O_2	65.5	20 @ actual O_2	51.9	106
VOM	1.4 @ actual O_2	2.2	3.5 @ actual O_2	5.6	4
SO_2	-	4.0	-	60.8	11
PM/PM_{10}*	-	5.0	-	10.0	10

* PM and PM_{10} limits only address front half (filterable) particulates.

Notes: Compliance with concentration (ppmvd) and hourly (lb/hr) limits shall be determined on a 3-hour block average, consistent with applicable procedures for testing. These limits do not apply during startup, malfunction, or shutdown, which are addressed by Condition 7.7.6(f). Compliance with the annual limits shall be determined from a running total of 12 months of data and shall include emissions during startup, malfunction, or shutdown.

A. For purposes of determining compliance with the above limitations:

I. Unless emission monitoring is performed for a pollutant, emissions during periods other than startup shall be determined from emission factors developed from testing of the turbines (NOx, CO, VOM and PM/PM_{10}) and standard factors (SO_2).

II. Unless an alternative factor is established for the pollutant or emission monitoring is performed for the pollutant, emissions of NOx, CO and VOM during an hour that includes a startup shall be following emission rates. Any alternative factor for emissions during startup of affected turbines shall be based on representative emission testing conducted with USEPA Reference Test Methods.

Pollutant	Natural Gas Firing	Distillate Oil Firing
	(Lb/Hr)	(Lb/Hr)
NOx	60.0	170.0
CO	76.0	67.0
VOM	2.0	6.0

f. Each affected turbine shall be operated in a manner consistent with good air pollution control practice to minimize emissions during startup, malfunction, and shutdown, including: [T1]

i. Upon malfunction of an affected turbine that will result in emissions in excess of the applicable limits in Condition 7.7.6(e), the Permittee shall, as soon as practicable, repair the affected turbine or remove the affected turbine from service so that excess emissions cease.

ii. Consistent with the above, if the Permittee has maintained and operated the affected turbines including the water injection system so that malfunctions are infrequent, sudden, not caused by poor maintenance or careless operation, and in general are not reasonably preventable, the Permittee shall begin shutdown of the malfunctioning affected turbine within 90 minutes, unless the malfunction is expected to be repaired within 120 minutes or such shutdown could threaten the stability of the regional electrical power system. In such case, shutdown of the affected turbine shall be undertaken when it is apparent that repair will not be accomplished within 120 minutes or shutdown will not endanger the regional power system. In no case shall shutdown of the gas be delayed solely for the economic benefit of the Permittee.

iii. Notwithstanding the above, if the Permittee determines that the continuous emission monitoring system (CEMS), if required, is inaccurately reporting excess emissions, the Permittee may continue operation provided the Permittee records the information it is relying upon to conclude that the affected turbine is functioning properly and the CEMS is reporting inaccurate data, and the Permittee takes prompt action to resolve the accuracy of the CEMS.

Note: The above requirements of Conditions 7.7.6(b) through (f) were originally established in Construction Permit 00070029. Conditions 7.7.6(d), (e)(i) [CO limit in ppm], and (f), as applicable to emissions of CO, represent the application of Best Available Control Technology for CO, as required by PSD. The requirements for pollutants other than CO were intended to ensure that the construction and operation of the affected turbines do not constitute a major modification pursuant to the federal PSD rules.

g. i. If an affected turbine is routinely operated or exercised to confirm that the turbine will operate when needed, the operation and opacity of the turbine shall be formally observed by

operating personnel for the turbine or a member of Permittee's environmental staff on a regular basis to assure that the turbine is operating properly, which observations shall be made at least every six months.

ii. If an affected turbine is not routinely operated or exercised, i.e., the time interval between operation of an affected turbine is typically greater than six months, the operation and opacity of the affected turbine shall be formally observed as provided above each time the Permittee carries out a scheduled exercise of the affected turbine.

iii. The Permittee shall also conduct formal observations of operation and opacity of an affected turbine upon written request by the Illinois EPA. With the agreement of the Illinois EPA, the Permittee may schedule these observations to take place during periods when it would otherwise be operating the affected turbine.

7.7.7-1 Opacity and Emissions Testing Requirements

a. The Permittee shall have the opacity of the exhaust from the affected turbines during representative operating conditions determined by a qualified observer in accordance with USEPA Test Method 9, as further specified below, pursuant to Section 39.5(7)(b) of the Act.

i. A. For each affected turbine, once for every 500 hours of operation. For this purpose, testing shall first be conducted within the initial 50 hours of operation of the turbine pursuant to this permit.

B. Upon written request by the Illinois EPA, Such testing shall be conducted for specific turbine(s) within 45 calendar days of the request, or on the date turbine(s) next operates, or on the date agreed upon by the Illinois EPA, whichever is later.

ii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 10.0 percent.

iii. A. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This

notification shall include the name and employer of the qualified observer(s).

B. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.

C. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.

iv. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:

A. Date and time of testing.

B. Name and employer of qualified observer.

C. Copy of current certification.

D. Description of observation conditions.

E. Description of turbine operating conditions.

F. Raw data.

G. Opacity determinations.

H. Conclusions.

7.7.7-2 Fuel Oil Sampling and Analysis

a. i. The Permittee shall have the sulfur content of the oil supply to the affected turbines, in lb/mmBtu, determined from an analysis of representative sample of the oil supply, as follows, pursuant to Section 39.5(7)(d):

A. From a sample taken no later than 90 days after first operating the affected turbines pursuant to this permit, provided, however, that if such sample is taken following operation of the affected turbines, the sample shall be taken prior to adding more oil to the storage tank.

B. From a sample taken no later than 30 days after acceptance of a shipment of fuel whose sulfur content would not meet Condition 7.7.4(c) based upon supplier data, provided however, that if the affected turbines are operated following acceptance of such a shipment, the sample shall be taken prior to adding a

subsequent shipment of oil to the relevant storage tank.

C. From a sample taken no later than 30 days after a request for such a sample is made by the Illinois EPA, provided, however, that such sample shall be taken prior to adding more oil to the relevant storage tank.

Sampling and analysis, including that which forms the basis for the suppliers' data, shall be conducted using methods that would be acceptable under the federal New Source Performance Standards for Stationary Gas Turbines, 40 CFR 60.335(b)(2) and (c) or the federal Acid Rain Program, 40 CFR 75, Appendix D, Optional SO_2 Emissions Data Protocol for Gas-Fired and Oil-Fired Units e.g., ASTM D4057-88 and ASTM D129-91.

b. The Permittee shall have the NOx, CO, VOM and PM/PM10 emissions of the affected turbines during representative operating conditions measured, as further specified below, pursuant to Section 39.5(7)(d) of the Act.

i. Measurements shall be conducted within 90 days of a written request from the Illinois EPA.

ii. A. Testing for NOx shall be conducted using the applicable methods specified by 40 CFR 60.335 unless alternative test procedures are approved by USEPA pursuant to 40 CFR 60.8.

B. Testing for CO, VOM and PM/PM10 shall be conducted using appropriate USEPA Reference Test Methods, including Methods 5 and 202, 10, and 25A and/or 18 for PM/PM10, CO and VOM emissions, respectively.

C. For purposes of determining emissions of NOx for purposes of comparison to the limit in Condition 7.7.4(a)(ii), emissions shall be determined as the average of three separate test runs as provided by 40 CFR 60.8(f).

D. For purposes of determining emissions for comparison with the limitations in Condition 7.7.6(e)(i) and (e)(ii), emissions may be determined from the average of three separate runs as provided by 35 IAC Part 283.

ii. The Permittee shall submit a test plan to the Illinois EPA at least 60 days prior to testing, which plan shall include the information specified by Condition 8.6.2.

iv. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notification if it interferes with the Illinois EPA's ability to observe the testing.

v. The Permittee shall 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:

A. A summary of results.

B. Detailed description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

C. Detailed description of the operating conditions of the affected turbine during testing, including fuel consumption (scf/hr or gal/hr), firing rate (mmBtu/hr), and combustion system information, i.e., settings for combustion air.

D. Detailed data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

E. Opacity data (6-minute average and hourly average) measured during testing.

Note: Construction Permit 00070029 addressed the initial performance tests for the affected turbines including measurements for emissions of NOx, PM/PM10, CO and VOM.

7.7.8-1 Oerational Monitoring Requirements

a. i. The Permittee shall install and operate a continuous monitoring system to monitor and record the fuel consumption in each affected turbine. [40 CFR 60.334(a)]

ii. The Permittee shall install and operate a continuous monitoring system to monitor and record the ratio of water to fuel being fired in each affected turbine when water is being injected into the turbine to control NOx emissions, i.e., oil is being fired. [40 CFR 60.334(a)]

b. i. This permit is issued based on the affected turbines being peaking units, as specified in 40 CFR Part 75, so that continuous emission monitoring is not required for NOx. To maintain this status, the three year rolling average annual capacity factor of turbine shall not be greater than 10 percent, and the highest annual capacity factor shall not be greater than 20 percent in any one of the three averaging years.

ii. Should the operation of an affected turbine exceed the above requirements relating to the definition of a peaking unit in 40 CFR 75, the Permittee shall install the appropriate Continuous Monitoring System(s) on the turbine by December 31 of the following calendar year, as defined in 40 CFR 75, in order to remain in compliance with the provisions of the Acid Rain Program.

c. Pursuant to Sections 412 of the Clean Air Act and 40 CFR Parts 72 and 75, the source is required to conduct monitoring for the affected turbines for SO_2 and NOx emissions. (See also Condition 6.2.3)

7.7.8-1 Smpling and Analysis of Fuels

a. The Permittee shall comply with the applicable requirements of 40 CFR 60.334 for sampling and analysis of the sulfur and nitrogen content of the fuel supply to the affected turbines, except monitoring of fuel nitrogen content shall not be required if the Permittee does not rely on the adjustment factor for nitrogen content of fuel or during periods when natural gas is the only fuel fired in the affected turbines (This is because natural gas does not contain fuel-bound nitrogen and the free nitrogen in natural gas does not contribute appreciably to NOx emissions).

7.7.9 Recordkeeping Requirements

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

a. i. An operating log for each affected turbine, which shall include the following information:

A. I. Identification of each time the turbine is operated, with date, time, duration, and purpose (i.e., exercise or power service).

II. Further information for each time that the turbine is operated on oil, including information explaining why natural gas was not or could not be used, to address compliance with Condition 7.7.6(c)(v), and information confirming proper operation of the water injection system.

B. Information for the observations conducted pursuant to Condition 7.7.6(g), with date, time, personnel, and findings.

C. Information for any incident in which the operation of the turbine continued during malfunction or breakdown, including: date, time, and duration; a description of the incident; whether emissions exceeded or may have exceeded any applicable standard; a description of the corrective actions taken to reduce emissions and the duration of the incident; and a description of the preventative actions taken. [40 CFR 60.7(b)]

ii. A maintenance and repair log for each affected turbine and associated equipment, listing activities performed with date.

b. Records for each shipment of fuel for the affected turbines, including date, supplier, quantity (in gallons), sulfur content, heat content, and whether the SO_2 emissions from the burning of such fuel would meet the standard in Condition 7.6.4(b).

c. i. Records of the natural gas and distillate oil fuel usage for each affected turbine, scf/month and scf/year and gallons/month and gallons/year, respectively.

ii. Records of the heat content of the fuels being fired in the affected turbines.

iii. Records of the annual capacity factor of each affected each affected turbine, on annual basis, with supporting calculations.

d. Records for all opacity measurements made in accordance with USEPA Method 9 for an affected turbine that the Permittee conducts or that are conducted on

its behalf by individuals who are qualified to make such observations. For each occasion on which such observations are made, these records shall include the identity of the observer, a description of the various observations that were made, the observed opacity, and copies of the raw data sheets for the observations.

e. The Permittee shall comply with the recordkeeping and reporting requirements of 40 CFR 75 applicable to NOx emissions during the ozone control period, including, but not limited to, 40 CFR 75.54(b) and (d) [35 IAC 217.712(a) and (b)] including maintaining records of the heat input and NOx emissions of the turbine as determined in accordance with 35 IAC 217.710(c), and records of metered fuel use or operating hours used to determine heat input. [35 IAC 217.712(b)(1)]

f. Records of the operating hours and for the affected turbines, hr/day and hr/year.

g. Records of emissions of NOx from each affected turbine, with supporting data and calculations, tons/ozone season and tons/year (See also Conditions 7.7.8(a) and 7.7.10(c)).

h. The following records for a NOx CEMS if continuous monitoring required:

i. Any periods during which a continuous monitoring system was not operational, with explanation.

ii. Any day in which emissions exceeded an applicable standard.

i. Records of emissions (ton/month and ton/yr) of PM, NOx, CO, VOM and SO_2, from each affected turbine with supporting calculations including documentation for the emission factors used.

7.7.10 Reporting Requirements

a. Reporting of Deviations

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

i. A. The Permittee shall immediately notify the Illinois EPA's Regional Office, by telephone (voice, facsimile or electronic) for each incident in which the opacity

from an affected turbine exceeds or may have exceeded the limit in Condition 7.7.4(b) (30 percent) for three or more 6-minute averaging periods. (Otherwise, if opacity during an incident only exceeds or may have exceeded 30 percent for no more than one or two 6-minute averaging periods, the Permittee need only report the incident in accordance with Condition 7.7.10(a)(iii)(A).)

B. Upon conclusion of such incident, the Permittee shall submit a follow-up report to the Illinois EPA, Compliance Section and Regional Office, within 15 days providing a detailed description of the incident and its cause(s), an explanation why continued operation of the turbine 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 turbine was taken out of service.

ii. Notification within 30 days for a deviation from Condition 7.7.4(c) or 7.7.6(c)(i), with a copy of the applicable records for the incident.

iii. A. Reporting with the quarterly reports required for Boiler 123 by Condition 7.1.10-2(a) for other deviations from permit requirements not addressed by Condition 7.7.10(a)(i) or (ii), including deviations from applicable emission standards, inspection requirements, and recordkeeping requirements.

B. With these reports, the Permittee shall also address other instances of deviations that occurred during the quarter that have been separately reported in writing to the Illinois EPA as provided by Conditions 7.7.10(a)(i) and (ii), with a listing of such deviations and identification of each such written notification or report. For this purpose, the Permittee need not resubmit the detailed information provided in the initial written notifications and reports for such deviations.

b. i. The Permittee shall submit a report by November 30 of each year, to the Illinois EPA that demonstrates that each affected turbine has complied with Condition 7.7.4(d), pursuant to 35 IAC 217.712(d). 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. For the affected turbines, The Permittee shall submit copies of any records and data required by 35 IAC 217.712 to the Illinois EPA within 30 days after receipt of a written request from the Illinois EPA. [35 IAC 217.712(g)]

c. The Permittee shall furnish the Illinois EPA with written notification within 30 days as follows with respect to firing backup fuel:

i. Use of backup fuel in a turbine for more than 180 hours in a rolling 12 month period,

ii. Use of backup fuel in a turbine for a period of more than 6 hours other than for purposes of emissions testing or backup fuel system evaluation.

d. In conjunction with the Annual Emissions Report required by 35 IAC Part 254, the Permittee shall provide the following information for the preceding calendar year:

i. The operating hours of each turbine,

ii. The operating hours of each turbine with oil,

iii. The total number of startups for each turbine and,

iv. The total natural gas and oil consumption of the combustion turbines.

e. Acid Rain Program Reporting

Pursuant to Section 412 of the Clean Air Act and 40 CFR Parts 72 and 75, for the affected turbines, the source is subject to the reporting requirements of 40 CFR Part 75, which includes General Provisions; Notifications; Initial Certification or Recertification Application; and 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.

7.7.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.7.12 Compliance Procedures

a. i. Compliance with NOx emission limits of Condition 7.7.4(a)(i) is demonstrated by the monitoring requirements of 7.7.8 and by the recordkeeping requirements of 7.7.9.

ii. Compliance with Condition 7.7.4(a)(ii) is demonstrated by the monitoring requirements of 7.7.8 and by the recordkeeping requirements of 7.7.9.

b. Compliance with opacity limitation of Condition 7.7.4(b) is addressed by the inspection, testing and recordkeeping requirements in Conditions 7.7.6, 7.7.7, and 7.7.9(d).

c. Compliance with the SO2 limits in Conditions 7.7.4(a)(iii) and 7.7.4(c) is addressed by the sampling and analysis required by Condition 7.7.7-2 and the records required by Condition 7.7.9(c). For this purpose, complete conversion of sulfur to SO_2 shall be assumed, e.g., SO_2 emissions in lb/mmBtu are twice the sulfur content of the fuel supply, in lb/mmBtu.

Note: Stoichiometric combustion of distillate oil in the affected turbine with the maximum allowed sulfur content, i.e., 0.05 percent pursuant to Condition 7.8.6(c)(iv) would result in an SO_2 concentration in the exhaust of only about 30 ppm based on the F-factor for oil in USEPA's Reference Method 19, which is a fraction of the 2000 ppm limit in Condition 7.7.4(c).

d. Compliance with NOx emission limit of Conditions 7.7.4(a)(ii) and 7.7.4(d) is addressed by the monitoring and recordkeeping required by Conditions 7.7.8-1 and 7.7.9(b).

e. Compliance with the emission limitations of Condition 7.7.6(e) is addressed by the testing, monitoring and recordkeeping required by Conditions 7.7.7(b), 7.7.8-1(b), and 7.7.9.

f. Compliance with the operational requirements of Condition 7.7.6 is addressed by the recordkeeping required by Condition 7.7.9.

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

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA as specified in Section 6.2. To the extent that the federal regulations promulgated under Title IV of the CAA, are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV of the CAA shall take precedence pursuant to Section 39.5(17)(j) of the Act.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

a. The changes do not violate applicable requirements;

b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring

(including test methods), recordkeeping, reporting, or compliance certification requirements;

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

i. Describe the physical or operational change;

ii. Identify the schedule for implementing the physical or operational change;

iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the condition of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Section 7 of this permit [Section 39.5(7)(f) of the Act]:

Monitoring Period	Report Due Date
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;

e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency (MC 40)
Bureau of Air
Compliance & Enforcement Section (MC 40)
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

iii. USEPA Region 5 - Air Branch

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

c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
1021 North Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the Clean Air Act (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a combination of conditions of such previous permits and revisions to those conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule. [Section 39.5(7)(j)(iv) of the Act]

9.1.2 In particular, this permit does not alter or affect the following:

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance with, or violation of, any applicable requirement to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the Permittee, including, but not limited to, challenging the use of the USEPA’s credible evidence rule in the context of any future proceeding consistent with *Clean Air Implementation Project v. EPA*, 150 F3d 1200 (D.C. Circuit 1998).

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application. [Section 39.5(7)(o)(i) of the Act]

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Board regulations. [Section 39.5(6)(c) of the Act]

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following. [Sections 4 and 39.5(7)(a) and (p)(ii) of the Act]

a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor any substances or parameters at any location:

   i. At reasonable times, for the purposes of assuring permit compliance; or

ii. As otherwise authorized by the CAA or the Act;

e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Fees

The Permittee shall pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto. [Section 39.5(7)(o)(vi) of the Act] Fees shall be paid by check sent to the Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege. [Section 39.5(7)(o)(iv) of the Act]

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. [Section 39.5(12)(b)(iv) of the Act]

9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [Section 39.5(7)(e)(ii) of the Act]

b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period

of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254 and Section 4(b) of the Act.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to: (1) the Illinois EPA, Air Compliance Section, (2) the Illinois EPA, Air Regional Field Office, and (3) USEPA Region 5 – Air Branch. (The addresses for the submittal of these compliance certifications are provided in Condition 8.6.4.)

a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act. [Section 39.5(7)(p)(i) of the Act] An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [Section 39.5(7)(o)(ii) of the Act]

9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating 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;

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, revoked, reopened and reissued, or terminated for cause in accordance with applicable provisions of Section 39.5 of the Act. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [Section 39.5(7)(o)(iii) of the Act]

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur: [Section 39.5(15)(a) of the Act]

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or that inaccurate statement were made in establishing the emission standards or limitations, or other terms or conditions of this permit; and

d. The Illinois EPA or USEPA determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality. [Section 39.5(7)(o)(v) of the Act]

9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, other portions of this permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force. [Section 39.5(7)(i) of the Act]

9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit. [Sections 39.5(5)(l) and (o) of the Act]

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

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

10.0 ATTACHMENTS

10.1 Attachment 1 Emissions of Particulate Matter from New Process Emission Units

35 IAC 212.321 - Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	11.42	24.8
B	0.16	0.16

c. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 19, 1972 [35 IAC 212.321(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77

0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

10.2 Attachment 2 Emissions of Particulate Matter from Existing Process Emission Units

35 IAC 212.322 - Process Emission Units for Which Construction or Modification Commenced Prior to April 14, 1972

a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].

b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

$$E = C + A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

ii. For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	25.21	55.0
B	0.11	0.11
C	-18.4	-40.0

c. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972 [35 IAC 212.322(c)]:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.27	0.05	0.55
0.1	0.42	0.10	0.87
0.2	0.68	0.2	1.40
0.3	0.89	0.30	1.83
0.4	1.07	0.40	2.22

0.5	1.25	0.50	2.58
0.7	1.56	0.75	3.38
0.9	1.85	1.00	4.10
1.8	2.9	2.00	6.52
2.7	3.9	3.00	8.56
3.6	4.7	4.00	10.40
4.5	5.4	5.00	12.00
9.0	8.7	10.00	19.20
13.0	11.1	15.00	25.20
18.0	13.8	20.00	30.50
23.0	16.2	25.00	35.40
27.2	18.15	30.00	40.00
32.0	18.8	35.00	41.30
36.0	19.3	40.00	42.50
41.0	19.8	45.00	43.60
45.0	20.2	50.00	44.60
90.0	23.2	100.00	51.20
140.0	25.3	150.00	55.40
180.0	26.5	200.00	58.60
230.0	27.7	250.00	61.00
270.0	28.5	300.00	63.10
320.0	29.4	350.00	64.90
360.0	30.0	400.00	66.20
400.0	30.6	450.00	67.70
454.0	31.3	500.00	69.00

10.3 Attachment 3 Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.4 Attachment 4 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, www.epa.state.il.us. 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

Guidance On Renewing A CAAPP Permit:

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

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

10.5 Attachment 5 - Acid Rain Program Permit

217-782-2113

ACID RAIN PROGRAM
PERMIT

Southern Illinois Power Cooperative
Attn: Leonard F. Hopkins, Designated Representative
11543 Lake of Egypt Road
Marion, Illinois

Oris No.: 976
IEPA I.D. No.: 199856AAC
Source/Unit: Marion/Unit 4, CFB Unit 123, Combustion Turbine (CT) Units 5 & 6
Date Received: December 16, 2004
Date Issued: March 21, 2005
Effective Date: January 1, 2005
Expiration Date: December 31, 2009

STATEMENT OF BASIS:

In accordance with Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program permit to the Southern Illinois Power Cooperative for its Marion facility.

SULFUR DIOXIDE (SO_2) ALLOCATIONS AND NITROGEN OXIDES (NO_x) LIMITS FOR EACH AFFECTED UNIT:

CFB Unit 123	SO_2 Allowances, Under Tables 2, 3, or 4 of 40 CFR Part 73*	2005	2006	2007	2008	2009
		6,517	6,517	6,517	6,517	6,517
	Nitrogen Oxide (NO_x) Limit	These units are not subject to a NO_x emissions limitation pursuant to 40 CFR Part 76.				

* SO_2 allocations for Boilers 1, 2, and 3, which were repowered by new CFB Boiler 123.

UNIT 4	SO_2 Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	2005	2006	2007	2008	2009
		6,839	6,839	6,839	6,839	6,839
	NO_x Limit	0.86 Lb/mmBtu (Standard Limit for Cyclone Fired Boilers)				

CT 5 and 6	SO_2 Allowances, under Tables 2, 3, or 4 of 40 CFR Part 73	2005	2006	2007	2008	2009
		None	None	None	None	None
	NO_x Limit	These units are not subject to a NOx emissions limitation pursuant to 40 CFR Part 76.				

PERMIT APPLICATION: The permit application, which includes the NO_x compliance plan, SO_2 allowance requirements and other standard requirements is attached and incorporated as part of this permit. The owners and operators of this source must comply with the standard requirements and special provisions set forth in the application.

COMMENTS, NOTES, AND JUSTIFICATIONS:

This permit contains provisions related to SO_2 emissions and requires the owners and operators to hold SO_2 allowances to account for SO_2 emissions from the affected units. An allowance is a limited authorization to emit up to one ton of SO_2 during or after a specified calendar year. Although Marion Units CT 5 and 6 are not eligible for an allowance allocated by USEPA, the owners or operators may obtain SO_2 allowances to cover emissions from other sources under a marketable allowance program. The transfer of allowances to and from a unit account does not necessitate a revision to the unit SO_2 allocations denoted in this permit (See 40 CFR 72.84).

This permit contains provisions related to NO_x emissions requiring Marion Unit 4 to comply with applicable emission limitations for NO_x under the Acid Rain program. Pursuant to 40 CFR 76, the Illinois EPA is approving NO_x standard emission limitation compliance plan for Marion Unit 4. The compliance plan is effective for calendar years 2005 through 2009. Under the compliance plan, annual average NO_x emission rate for each year for Marion Unit 4, shall not exceed the applicable emission limitation, under 40 CFR 76.6(a)(2), of 0.86 lb/million Btu for cyclone fired boilers, determined in accordance with 40 CFR Part 75.

In addition to the described NO_X compliance plan, each unit shall comply with all other applicable requirements of 40 CFR Part 75 and 76, including, the duty to reapply for a NO_X compliance plan, and requirements covering excess emissions.

This permit does not affect the source's responsibility to meet all other applicable local, state and federal requirements, including state requirements under 35 Ill. Adm. Code Part 217 Subpart W, which addresses NO_x emissions from Marion Units, Unit 4, CFB Unit 123, and Combustion Turbine (CT) Units 5 and 6.

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

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

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

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

EPA

Acid Rain Permit Application

RECEIVED
DEC 1 6 2004
IEPA-DAPC-SPFLD.

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 ORIS code.

SOUTHERN ILLINOIS POWER COOP.
Plant Name MARION STA. State IL ORIS Code 0976

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a." For new units, enter the requested information in columns "c" and "d."

a	b	c	d
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	New Units Commence Operation Date	New Units Monitor Certification Deadline
UNIT 4	Yes		
UNIT 123	Yes		
UNIT 5	Yes		
UNIT 6	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

EPA Form 7610-16 (rev. 12-03)

SOUTHERN IL. POWER COOP.
Plant Name (from Step 1): MARION STATION

STEP 3

Read the standard requirements

Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(3); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

STEP 3, Cont'd.

Nitrogen Oxides Requirements The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

SOUTHERN ILLINOIS POWER COOP.
Plant Name (from Step 1) MARION STATION

Step 3, Cont'd.

Liability, Cont'd.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, excepting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

Read the certification statement, sign, and date

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

Name LEONARD F. HOPKINS, P.E.	
Signature [signature]	Date 5/12/04

EPA Form 7610-16 (rev. 12-03)

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Phase II NO_x Compliance Plan

Page 7 of 7

For more information, see instructions and refer to 40 CFR 76.9

This submission is: ☐ New ☐ Revised

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

Plant Name	State	ORIS Code
SOUTHERN IL. POWER COOPERATIVE MARION STATION	IL	0976

STEP 2

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

	ID# 4 Type CY	ID# 123 Type	ID# Type	ID# Type	ID# Type	ID# Type
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	☐	☐	☐	☐	☐	☐
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	☐	☐	☐	☐	☐	☐
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/97 (also indicate above emission limit specified in plan)	☐	☐	☐	☐	☐	☐
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	☐	☐	☐	☐	☐	☐
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	☐	☐	☐	☐	☐	☐
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)	☐	☐	☐	☐	☐	☐
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)	☑	☐	☐	☐	☐	☐
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	☐	☐	☐	☐	☐	☐
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	☐	☐	☐	☐	☐	☐
(j) NO_x Averaging Plan (include NO_x Averaging form)	☐	☐	☐	☐	☐	☐
(k) Common stack pursuant to 40 CFR 76.11(e)(2)(iii)(A) (attach the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	☐	☐	☐	☐	☐	☐
(l) Common stack pursuant to 40 CFR 76.11(e)(2)(iii)(B) with NO_x Averaging (Check the NO_x Averaging Plan box and include NO_x Averaging form)	☐	☐	☐	☐	☐	☐

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SOUTHERN IL POWER COOPERATIVE

Plant name (from step 1) MARION STATION

ID, Compliance - Page 2

Page 2 of 3

STEP 2, cont'd.

ID#	4	123				
Type	CY					
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 76.17 (a)(2)(ii)(C), (a)(2)(ii)(B), or (b)(2)	☐	☐	☐	☐	☐	☐
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	☐	☐	☐	☐	☐	☐
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	☐	☐	☐	☐	☐	☐
(p) Repowering extension plan approved or under review	☐	☑	☐	☐	☐	☐

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 76.8(a)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to the emissions limitation for NO_x as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(a)(3)(ii).

Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2000 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 emission limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election plan is effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(b) 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_x 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_x 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 LEONARD F. HOPKINS, P.E.	
Signature	Date 5/28/04

EPA Form 7610-28 (12-98)