

217/782-2113

RENEWAL
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Prairie Power, Inc.
Attn: Randy Fisher, Superintendent Illinois Generation
Post Office Box 10
Pearl, Illinois 62361

I.D. No.: 171851AAA
Application No.: 01050083

Date Received: January 19, 2007
Date Issued: December 23, 2008
Expiration Date¹: December 23, 2013

Operation of: Prairie Power, Inc., Electric Generation
Source Location: 1175 Campbell Road, Alsey, Scott County, 62610
Responsible Official: Randy Fisher, Superintendent Illinois Generation

This permit is hereby granted to the above-designated Permittee to OPERATE an electric power generation plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

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

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

ECB:KKD:psj

cc: Illinois EPA, FOS, Region 2
CES
Lotus Notes

¹ Except as provided in Conditions 1.5 and 8.7 of this permit.

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1.0 INTRODUCTION

1.1 Source Identification

Prairie Power, Inc.
1175 Campbell Road
Alsey, Illinois 62610
217/829-4291

I.D. No.: 171851AAA
County: Scott
Standard Industrial Classification: 4911, Electric Power Generation

1.2 Owner/Parent Company

Prairie Power, Inc.
Post Office Box 610
Jacksonville, Illinois 62651

1.3 Operator

Prairie Power
13476 State Highway 100
Pearl, Illinois 62361

Randy Fisher, Superintendent Illinois Generation
217/829-4212

1.4 Source Description

The generating station is located at 1175 Campbell Road in Alsey. The source operates gas-fired turbines for the purpose of generating electricity.

Note: This narrative description is for informational purposes only and is not enforceable.

1.5 Title I Conditions

As generally identified below, this CAAPP permit contains certain conditions for emission 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 PSD and MSSCAM, and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of the Illinois Environmental Protection Act (Act). 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.)

- a. This permit contains Title I conditions that reflect Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1."

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
BAT	Best Available Technology
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
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
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
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MSSCAM	Major Stationary Sources Construction and Modification (35 IAC 203, New Source Review for non-attainment areas)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
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
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PSD	Prevention of Significant Deterioration (40 CFR 52.21, New Source Review for attainment areas)
RMP	Risk Management Plan
SO ₂	Sulfur Dioxide
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:

None

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

None

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

Storage tanks of 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)].

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

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b). Note: These activities are not required to be individually listed.

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 5.3.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC

Part 266. 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.

- 3.2.2 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, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.3 For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary.
- 3.2.4 For each storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia at 70°F, the Permittee shall comply with the applicable requirements of 35 IAC 215.122, which requires use of a permanent submerged loading pipe, submerged fill, or a vapor recovery system.

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	Date Constructed	Emission Control Equipment
ACT 1	30 MW Turbine Fired by Natural Gas or Distillate Fuel Oil (450 mmBtu/Hr)	1973	Water Injection
ACT 2	30 MW Turbine Fired by Natural Gas or Distillate Fuel Oil (450 mmBtu/Hr)	1973	Water Injection
ACT 3	18 MW Turbine Fired by Natural Gas or Distillate Fuel Oil (229 mmBtu/Hr)	June 1977	Water Injection when Natural Gas Fired
ACT 4	18 MW Turbine Fired by Natural Gas or Distillate Fuel Oil (229 mmBtu/Hr)	June 1977	Water Injection when Natural Gas Fired
ACT 5	25 MW Turbine Fired by Natural Gas or Distillate Fuel Oil (306 mmBtu/Hr)	1971	Dry Low NO _x Burner
Engine #1, 2, and 3	Diesel startup engine Distillate: 635 Hp	1973	None

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 NO_x emissions.

5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated attainment or unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants (CO, lead, NO₂, ozone, PM_{2.5}, PM₁₀, SO₂).

5.3 Source-Wide Applicable Provisions and Regulations

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

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

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. Pursuant to 35 IAC 212.123(a), 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, except as allowed by 35 IAC 212.123(b) and 212.124.

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

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

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

5.3.4 Risk Management Plan (RMP)

Should this stationary source, as defined in 40 CFR 68.3, become subject to the federal regulations for Chemical Accident Prevention in 40 CFR Part 68, then the owner or operator shall submit the items below. This condition is imposed in this permit pursuant to 40 CFR 68.215(a)(2)(i) and (ii).

- 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 requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

5.3.5 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (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.

5.3.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, 244.142, and 244.143, 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 and is incorporated by reference into this permit.

- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.
- c. If an operational change occurs at the source which 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.

5.4 Source-Wide Non-Applicability of Regulations of Concern

Source-wide non-applicability of regulations of concern are not set for this source. However, there are terms for unit specific non-applicability of regulations of concern set forth in Section 7 of this permit.

5.5 Source-Wide Control Requirements and Work Practices

Source-wide control requirements and work practices are not set for this source. However, there are requirements for unit specific control requirements and work practices set forth in Section 7 of this permit.

5.6 Source-Wide Production and Emission Limitations

5.6.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.6.1) are set for the purpose of establishing fees and are not federally enforceable (see Section 39.5(18) of the Act).

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	20.0
Sulfur Dioxide (SO ₂)	29.0
Particulate Matter (PM)	17.0
Nitrogen Oxides (NO _x)	249.0
HAP, not included in VOM or PM	----
Total	315.0

5.6.2 Emissions of Hazardous Air Pollutants

Pursuant to Section 39.5(7) (a) of the Act, the emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). This condition is being imposed so that the source is not a major source of HAP emissions and the requirements of 40 CFR Part 63, Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, do not apply to the source. The Permittee shall fulfill the applicable testing, recordkeeping, and reporting requirements of Conditions 5.7.2, 5.9.2, and 5.10.2.

5.6.3 Other Source-Wide Production and Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to the federal rules for PSD, state rules for MSSCAM, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.7 Source-Wide Testing Requirements

5.7.1 Pursuant to 35 IAC 201.282 and Section 4(b) of the Act, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].
- b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].
- c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.7.2 HAP Testing to Verify Minor Source Status

Pursuant to Condition 5.7.1 and to verify compliance with the requirements of Condition 5.6.2, that is that this source is not a major source of HAPs, the following testing requirements are established:

- a. If in the previous calendar year, emissions of HAPs exceeded 80% of major source threshold for individual or total HAPs (greater than 8 tons of a single HAP or greater than 20 tons of total HAPs), then testing for HAPs shall be conducted as follows:
 - i. Testing shall be conducted using methods that would be acceptable under the federal National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, 40 CFR 63 Subpart YYYY. Specifically, the testing procedures detailed at 40 CFR 63.6120 of the performance tests section shall be used. For multiple turbines, the source owner or operator shall test largest turbine which makes the largest contributions to individual and total HAP emissions.
 - b. The calculation as to whether the 80% of major source threshold was exceeded shall be based on records and procedures in Condition 5.9.2 and shall be completed by January 31 for the previous calendar year. If testing is required it shall be completed by May 1st.
 - c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.8 Source-Wide Monitoring Requirements

Source-wide monitoring requirements are not set for this source. However, there are provisions for unit specific monitoring set forth in Section 7 of this permit.

5.9 Source-Wide Recordkeeping Requirements

5.9.1 Annual Emission Records

The Permittee shall maintain records of total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.1, pursuant to Section 39.5(7)(b) of the Act.

5.9.2 Records for HAP Emissions

- a. The Permittee shall maintain records of individual and combined HAP emissions on a monthly and annual basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.2, pursuant to Section 39.5(7) (b) of the Act.
- b. If testing is required by Condition 5.7.2, the Permittee shall keep records of the testing, including the test date, conditions, methodologies, calculations, test results, and any discrepancies between the test results and formulation specifications of Condition 5.9.2(c) below.
- c. The Permittee shall keep a record of the applicability determination for 40 CFR 63, Subpart YYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, at the source for a period of five years after the determination. This determination shall include a detailed analysis that demonstrates why the Permittee believes the source is not subject to 40 CFR 63, Subpart YYYY [40 CFR 63.10(b) (3)].

5.9.3 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.10 Source-Wide Reporting Requirements

5.10.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the source with the permit requirements within 30 days, 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. There are also reporting requirements for unit specific emission units set forth in Section 7 of this permit.

5.10.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information, including HAP emissions, for the previous calendar year.

5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

Source-wide operational flexibility is not set for this source.

5.12 Source-Wide Compliance Procedures

5.12.1 Procedures for Calculating Emissions

Except as provided in Condition 9.1.3, compliance with the source-wide emission limits specified in Condition 5.6 shall be addressed by the recordkeeping and reporting requirements of Conditions 5.9 and 5.10, and compliance procedures in Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit.

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

This section is reserved for emissions control programs. As of the date of issuance of this permit, there are no such programs applicable to this source.

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Natural Gas-Fired Turbine (Subject to NSPS - 40 CFR Subpart GG)

7.1.1 Description

The turbines are process emission units used to generate electricity. The turbines are powered by natural gas or distillate fuel oil.

Note: This narrative description is for informational purposes only and is not enforceable.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
ACT 1 and ACT 2	30 MW Turbines Fired by Natural Gas or Distillate Fuel Oil (450 mmBtu/Hr)	1973	Water Injection when Natural Gas Fired
ACT 3 and ACT 4	18 MW Turbines Fired by Natural Gas or Distillate Fuel Oil (229 mmBtu/Hr)	1977	Water Injection when Natural Gas Fired
ACT 5	25 MW Turbine Fired by Natural Gas or Distillate Fuel Oil (306 mmBtu/Hr)	1971	Dry Low NO _x Burner

7.1.3 Applicable Provisions and Regulations

- a. The "affected turbines" for the purpose of these unit-specific conditions, are turbines described in Conditions 7.1.1 and 7.1.2.
- b. Pursuant to 35 IAC 212.123,
 - i. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit.
 - ii. The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 1000 ft radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions

permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

- c. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.
- d. i. A. No owner or operator shall cause or allow the emissions of NO_x into the atmosphere from affected turbines ACT 1, ACT 2, and ACT 5 to exceed 0.25 lbs/mmBtu of actual heat input during each ozone control period from May 1 through September 30, based on an ozone control period average, for that unit [35 IAC 217.706(a)].
B. Notwithstanding the above emission limitation of 35 IAC 217.706(a), if affected turbine ACT 1, ACT 2, or ACT 5 are subject to a more stringent NO_x emission limitation pursuant to any State or federal statute, including the Act, the Clean Air Act, or any regulations promulgated there under, it shall comply with both the requirements of 35 IAC 217 Subpart V and that more stringent emission limitation [35 IAC 217.706(b)].
- ii. A. Notwithstanding 35 IAC 217.706(a) above, the Permittee may elect to demonstrate compliance with 35 IAC 217 Subpart V by averaging for the ozone control period the NO_x emission rates [35 IAC 217.708(a)].
B. The average NO_x emission rate for all EGUs being averaged pursuant to 35 IAC 217 Subpart V must not exceed 0.25 lbs/mmBtu and shall be determined as follows: [35 IAC 217.708(b)]

$$ER_{avg} = \frac{\sum (HI_i \times ER_i)}{\sum HI_i}$$

Where:

Σ = Summation of i=1 to n

ER_{avg} = Average emission rate in lb/mmBtu of all EGUs in averaging demonstration

HI_i = Heat input for the ozone control period of EGU i, in mmBtu, as specified in the NO_x averaging demonstration

ER_i = Actual NO_x emission rate of EGU i , in
lbs/mmBtu, as specified in the NO_x
averaging demonstration

n = Number of EGUs that are averaging

- C. An EGU may be included in only one NO_x averaging demonstration during an ozone control period [35 IAC 217.708(d)].
- D. Compliance by averaging for each ozone control period must be demonstrated by November 30 following each ozone control period [35 IAC 217.708(e)].
- E. If averaging is used to demonstrate compliance with 35 IAC 217 Subpart V, the effect of a failure to demonstrate such compliance shall be that the compliance status of each EGU shall be determined pursuant to 35 IAC 217.706(a) as if the NO_x emission rates of such EGUs were not averaged [35 IAC 217.708(f)].
- F. The owner or operator of any EGU that elects to participate in an averaging demonstration to demonstrate compliance with this 35 IAC 217 Subpart V cannot average with any other EGU for which the owner or operator of such EGU does not maintain the required records, data, and reports, or does not submit copies of such records, data, or reports to the Illinois EPA upon request [35 IAC 217.708(g)].

7.1.4 Non-Applicability of Regulations of Concern

- a. The affected turbines are not subject to the New Source Performance Standards (NSPS) for Stationary Combustion Turbines, 40 CFR Part 60, Subpart KKKK, because the affected turbines did not commence construction, modification, or reconstruction after February 18, 2005 pursuant to 40 CFR 60.4305(a), and are therefore subject to 40 CFR Part 60, Subpart GG for Stationary Gas Turbines.

Note: To qualify for this non-applicability, the Permittee has certified that the turbines have not been modified or reconstructed after February 18, 2005.

- b. The affected turbines are not subject to the National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, 40 CFR Part 63, Subpart YYYY, because the affected turbines are not located at a major source of HAP emissions, pursuant to 40 CFR 63.6085.

- c. The affected turbines are not subject to 35 IAC 212.321 or 212.322, due to the unique nature of such units, a process weight rate can not be set so that such rules can not reasonably be applied, pursuant to 35 IAC 212.323.
- d. The affected turbines are not subject to 35 IAC 217.141 or 35 IAC 216.121 because the affected turbines are not fuel combustion units, as defined by 35 IAC 211.2470.
- e. The affected turbines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources:
 - i. For NO_x and SO₂, because:
 - A. The affected turbines are subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).
 - B. The affected turbines are subject to Acid Rain Program requirements, pursuant to 40 CFR 64.2(b)(1)(iii).
 - C. The affected turbines are subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method, pursuant to 40 CFR 64.2(b)(1)(vi).
 - ii. For PM, VOM, and CO because the affected turbines do not use an add-on control device to achieve compliance with an emission limitation or standard.
- f. This permit is issued based on the affected turbines not being subject to the New Source Performance Standards (NSPS) for Stationary Gas Turbines, 40 CFR Part 60, Subpart GG, because the affected turbines commenced construction, modification, or reconstruction prior to October 3, 1977.

7.1.5 Control Requirements and Work Practices

- a. i. At all times, including periods of startup, shutdown, and malfunction, the source owner or operator 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)].

- ii. The source owner or operator shall operate the affected turbines in accordance with written operating procedures that shall include at a minimum the following measures:
 - A. Review of operating parameters of the unit during startup or shutdown as necessary for the proper operation of the affected turbine with appropriate adjustments to reduce emissions.
 - B. Implementation of inspection and repair procedures for a affected turbine prior to attempting startup following repeated trips.
 - iii. The source owner or operator shall maintain the affected turbines in accordance with written procedures that shall include at a minimum the following measures:
 - A. Monthly inspection of emissions-related components.
 - B. Repair and routine replacement of emissions-related components.
 - iv. The above procedures may incorporate the manufacturer's written instruction for operation and maintenance of the affected turbines and associated control systems. The source owner or operator shall review these procedures at least every two years and shall revise or enhance them if necessary to be consistent with good air pollution control practice based on the actual operating experience and performance of the source.
- b. Natural gas or distillate fuel oil shall be the only fuels fired in the affected turbines.
 - c. Distillate fuel oil with a sulfur content greater than 0.3 weight percent shall not be fired in the affected turbines.
 - d. Affected turbine ACT 5 shall be equipped, operated, and maintained with a dry low NO_x burner to control NO_x emissions.
 - e. Affected turbines ACT 1, ACT 2, ACT 3 and ACT 4 shall be equipped, operated, and maintained with water injection to control NO_x emissions.
 - f. The affected turbines shall be equipped, operated, and maintained with a system to measure and record their fuel consumption.

7.1.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected turbines are subject to the following:

- a. Combined operation of the affected turbines shall not exceed a fuel heat input of 1,554,980 mmBtu per year. Compliance with the annual limitation shall be determined from a running total of 12 months of data. This limit reflects the affected turbines operating for about 1015 hours/year with distillate oil being used 10 percent of the time.
- b. Hourly emissions from affected turbines ACT 1 and ACT 2 shall not exceed the following limits, except when ice fog is deemed a traffic hazard by the Permittee:

<u>Pollutant</u>	<u>Natural Gas Fired (Lb/Hour)</u>	<u>Distillate Fuel Oil Fired (Lb/Hour)</u>
NO _x	95.0	125.0
CO	20.0	8.0
SO ₂	0.5	113.6
VOM	9.0	9.0
PM	7.2	14.3

- c. Hourly emissions from affected turbines ACT 3 and ACT 4 shall not exceed the following limits, except when ice fog is deemed a traffic hazard by the Permittee:

<u>Pollutant</u>	<u>Natural Gas Fired (Lb/Hour)</u>	<u>Distillate Fuel Oil Fired (Lb/Hour)</u>
NO _x	74.0	182.0
CO	3.0	2.0
SO ₂	0.5	100.0
VOM	4.8	3.4
PM	4.4	7.6

- d. Hourly emissions from affected turbine ACT 5 shall not exceed the following limits:

<u>Pollutant</u>	<u>Natural Gas Fired (Lb/Hour)</u>	<u>Distillate Fuel Oil Fired (Lb/Hour)</u>
NO _x	115.0	195.0
CO	33.7	14.5
SO ₂	0.3	110.0
VOM	7.4	5.1
PM	5.9	11.4

- e. Annual emissions from the affected turbines shall not exceed the following limits:

<u>Pollutant</u>	<u>(Ton/Year)</u>
NO _x	249.0
CO	58.0
SO ₂	29.0
VOM	20.0
PM	17.0

- f. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].
- g. The above limitations were established in Permit 05060073, pursuant to PSD. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD [T1].

7.1.7 Testing Requirements

- a. The nitrogen oxides (NO_x) emissions, and the oxygen (O₂) concentration and opacity of exhaust shall be measured for the affected turbines at the source owner or operator's expense by an independent testing service approved by the Illinois EPA as follows to determine compliance with applicable emission limits:
 - i. Within 120 days after a written request from the Illinois EPA, for such pollutants listed above as specified by the request.
 - ii. Any extension to these time periods that may be provided at its discretion by the Illinois EPA shall not alter the source owner or operator's obligation to perform emission testing for purposes of the NSPS in a timely manner as specified by 40 CFR 60.8.
- b. The following methods and procedures shall be used for testing of emissions:
 - i. The USEPA Reference Test Methods shall be used including the following:

Opacity	USEPA Method 9
Nitrogen Oxides	USEPA Method 20
- c. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA

for review. This plan shall describe the specific procedures for testing and shall include as a minimum:

- i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - ii. The specific conditions under which testing shall 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 turbine will be tracked and recorded.
 - iii. The specific determinations of emissions that are intended to be made, including sampling and monitoring locations; the test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods. The source owner or operator may also propose a plan for testing across the normal operating range of the affected turbines.
- d. 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 thirty (30) days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five (5) working days prior to the actual date of the test. The Illinois EPA may, at its discretion, accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe the testing.
- e. The Final Report for these tests shall be submitted to the Illinois EPA within 60 days after the date of the tests. The Final Report shall include as a minimum:
- i. A summary of results.
 - ii. General information.
 - iii. Description of test method(s), including description of sampling points, sampling train, analysis equipment and test schedule.
 - iv. Detailed description of test conditions, including:
 - A. Fuel consumption (standard ft³).
 - B. Firing rate (million Btu/hr).
 - C. Turbine/Generator output rate (MW).

- v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- f.
 - i. Upon written request by the Illinois EPA, the source owner or operator shall have the opacity of the exhaust from the affected turbine(s) tested during representative operating conditions as 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.
 - ii. Such testing shall be conducted for specific turbine(s) within 90 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.
 - iii. 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.
 - iv. The source owner or operator 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).
 - v. The source owner or operator shall promptly notify the Illinois EPA of any changes in the time or date for testing.
 - vi. The source owner or operator shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
 - vii. The source owner or operator 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.

7.1.8 Monitoring Requirements

- a.
 - 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 affected turbine shall be formally observed by operating personnel for the affected turbine or a member of source owner or operator's environmental staff on a regular basis to assure that the affected 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 source owner or operator carries out a scheduled exercise of the affected turbine.
 - iii. The source owner or operator 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 source owner or operator may schedule these observations to take place during periods when it would otherwise be operating the affected turbine.

Note: The formal observation required above is not intended to be a USEPA Test Method 9 opacity test, nor does the observation require a USEPA Test Method 9 certified observer. It is intended to be performed by personnel familiar with the operation of the affected turbine who would be able to make a determination based from the observed opacity as to whether or not the affected turbine was running properly, and subsequently initiate a corrective action if necessary.

- b.
 - i. The owner or operator of an affected turbine subject to 35 IAC 217 Subpart V (Condition 7.1.3(e)) shall install, calibrate, maintain and operate continuous emissions monitoring systems (CEMS) for NO_x that meet the requirements of 40 CFR 75, Subpart B [35 IAC 217.710(a)].
 - ii. Notwithstanding 35 IAC 217.710(a) above, the owner or operator of a gas-fired peaking unit or oil-fired

peaking unit as defined in 40 CFR 72.2 may determine NO_x emissions in accordance with the emissions estimation protocol of 40 CFR 75, Subpart E [35 IAC 217.710(b)].

iii. Notwithstanding 35 IAC 217.710(a) above, the owner or operator of a combustion turbine that operates less than 350 hour per ozone control period may determine the heat input and NO_x emissions of the turbine as follows [35 IAC 217.710(c)]:

A. Heat input shall be determined from the metered fuel usage to the turbine or the calculated heat input determined as the product of the turbine's maximum hourly heat input and hours of operation as recorded by operating instrumentation on the turbine [35 IAC 217.710(c) (1)].

B. NO_x emissions shall be determined as the product of the heat input, as determined above, and the appropriate default NO_x emission factors below [35 IAC 217.710(c) (2)]:

0.7 lbs/mmBtu - Natural gas

1.2 lbs/mmBtu - Fuel oil

c. i. The affected turbine shall be equipped, operated, and maintained with a continuous monitoring system to monitor and record the fuel consumption being fired.

ii. If a water injection system is used, the affected turbine shall be equipped, operated, and maintained with a continuous monitoring system to monitor and record the ratio of water to fuel being fired, pursuant to 40 CFR 60.334(a).

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the source owner or operator shall maintain records of the following items for the affected turbine(s) to demonstrate compliance with Conditions 5.6.1, 7.1.3, 7.1.5, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

a. The owner or operator of an affected turbine subject to the requirements of 35 IAC 217 Subpart V (Condition 7.1.3(e)) shall:

i. Comply with the recordkeeping and reporting requirements of 40 CFR 75 applicable to NO_x emissions during the ozone control period, including, but not limited to, 40 CFR 75.54(b) and (d) [35 IAC 217.712(a)].

- ii. Notwithstanding 35 IAC 217.712(a) above, the owner or operator of a combustion turbine for which heat input and NO_x emissions are determined pursuant to 35 IAC 217.710(c) (Condition 7.1.8(c)(iii)) shall comply with the following recordkeeping and reporting requirements [35 IAC 217.712(b)]:
 - A. Maintain records of the heat input and NO_x 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)].
- b. The source owner or operator shall maintain records of the following items:
 - i. A. The three year rolling average annual capacity factor and the highest annual capacity factor in any one of the three averaging years to determine the status of the affected turbine as a "gas-fired peaking unit".
 - B. A record documenting whether the capacity factors exceeded the limitations for a gas fired peaking unit and whether Acid Rain Program Continuous Monitoring System(s) will be required.
 - ii. A copy of the Final Report(s) for emission testing conducted pursuant to Condition 7.1.7.
 - iii. Copies of opacity determinations taken for the source by qualified observer(s) using USEPA Method 9.
 - iv. Records documenting its periodic review of its operating procedures as required by Condition 7.1.5(a).
 - v. Information for the formal observations of opacity conducted pursuant to Condition 7.1.8(a). For each occasion on which observations are made, these records shall include the date, time, identity of the observer, a description of the various observations that were made, whether or not the affected engine was running properly, and whether or not corrective action is necessary and was subsequently initiated.
- c. A maintenance and repair log for the affected turbine, listing each activity performed with date.
- d. The sulfur content of the fuels fired in the affected turbine.

- e. Fuel consumption for the affected turbine, scf/month and scf/year.
- f. Ratio of water to fuel being fired in the affected turbine.
- g. Operating hours for the affected turbine, hr/month and hr/year.
- h. Heat content of the fuel being fired in the affected turbine.
- i. Emissions of each pollutant from the affected turbine, including emissions from startups, with supporting calculations including documentation on the validity of the emission factors used, ton/month and ton/year.
- j. The source owner or operator shall maintain records that identify:
 - i. Any periods during which a continuous monitoring system was not operational, with explanation.
 - ii. If a water injection system is used, any 1-hour period during which the average water to fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined by test to be necessary to comply with requirements for NO_x emissions, with the average water-to-fuel ratio, average fuel consumption, ambient conditions and turbine load.
 - iii. If a water injection system is used, any period when the affected turbine was in operation during which ice fog was deemed to be a traffic hazard, the ambient conditions existing during the periods, the date and time the water injection system was deactivated, and the date and time the system was reactivated.
 - iv. Any day in which emission and/or opacity exceeded an applicable standard or limit.
- k. The source owner or operator shall keep records of good operating practices for each turbine.
- l. The source owner or operator shall maintain the following records related to each startup and shutdown of the turbines:
 - i. The following information for each startup of the turbines:
 - A. Date and time of startup.

- B. Whether operating personnel for the turbines or air environmental staff are on site during startup.
 - C. A description of the startup, if written operating procedures are not followed during the startup or significant problems occur during the startup, including detailed explanation.
- ii. The following information for each shutdown of a turbine:
- A. Date and time of shutdown.
 - B. A description of the shutdown, if written operating procedures are not followed during the shutdown or significant problems occur during the shutdown, including detailed explanation.
- iii. The following information for the turbines when above normal opacity, as defined in Condition 7.1.8, has been observed by source personnel:
- A. Name of observer, position and reason for being at site.
 - B. Date and duration of above normal opacity, including affected turbine, start time and time normal operation was achieved.
 - C. If normal operation was not achieved within 30 minutes, an explanation why startup could not be achieved within this time.
 - D. A detailed description of the startup, including reason for operation.
 - E. An explanation why established startup procedures could not be performed, if not performed.
 - F. The nature of opacity following the end of startup or 30 minutes of operation, whichever occurs first, and duration of operation until achievement of normal opacity or shutdown.
 - G. Whether an exceedance of Condition 7.1.3(b), i.e., 30 percent opacity, may have occurred during startup, with explanation if qualified observer was on site.

7.1.10 Reporting Requirements

a. Reporting of Deviations

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

- i. Emissions from the affected turbine in excess of the limits specified in Conditions 7.1.3 and 7.1.6 within 30 days of such occurrence.
 - ii. Operation of the affected turbine in excess of the limits specified in Conditions 7.1.5 and 7.1.6 within 30 days of such occurrence.
- b. In conjunction with the Annual Emission Report required by 35 IAC Part 254, the source owner or operator shall provide the operating hours for each affected turbine, the total number of startups, the total fuel consumption during the preceding calendar year, and the records necessary from Condition 7.1.9(b)(i) which demonstrate the Acid Rain Program status of the affected turbine as a "gas-fired peaking unit."
- i. Annually report the heat input and NO_x emissions of the turbine as determined in accordance with 35 IAC 217.710(c) (Condition 7.1.8(c)(iii)), for each ozone control period, by November 30 of each year [35 IAC 217.712(b)(2)].
 - ii. Pursuant to 35 IAC 217.712(c) and (d), no later than November 30 of each year, the source owner or operator shall submit a report to the Illinois EPA that demonstrates that the affected turbine has complied with Condition 7.1.3(e). These reports shall be accompanied by a certification statement signed by a responsible official for the source owner or operator as specified by 35 IAC 217.712(c).

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected turbines.

7.1.12 Compliance Procedures

- a. Compliance with the opacity limitations of Conditions 7.1.3(b) is addressed by the requirements of Condition 7.1.5, the testing requirements of 7.1.7, the monitoring requirements of 7.1.8, and the records required in

Condition 7.1.9, and the reports required in Condition 7.1.10.

- b. Compliance with the SO₂ emission limitations of Conditions 7.1.3(c) is addressed by the requirements of Condition 7.1.5, the monitoring requirements of 7.1.8, the records required in Condition 7.1.9, and the reports required in Condition 7.1.10.
- c.
 - i. Compliance with the NO_x emission limitations of Conditions 7.1.3(d) (i) is addressed by the requirements of Condition 7.1.5, the testing requirements of 7.1.7, the monitoring requirements of 7.1.8, and the records required in Condition 7.1.9, and the reports required in Condition 7.1.10(a).
 - ii. Compliance with the NO_x emission limitations of Conditions 7.1.3(d) (ii) is addressed by the requirements of Condition 7.1.5, the monitoring requirements of 7.1.8, the records required in Condition 7.1.9, and the reports required in Condition 7.1.10(a).
- d.
 - i. Compliance with the NO_x emission limitations of Conditions 7.1.3 is addressed by the requirements of Condition 7.1.5, the testing requirements of 7.1.7, the monitoring requirements of 7.1.8, the records required in Condition 7.1.9, and the reports required in Condition 7.1.10(a).
 - ii. Notwithstanding 35 IAC 217.710(a), Condition 7.1.8(b), the owner or operator of a gas-fired peaking unit or oil-fired peaking unit as defined in 40 CFR 72.2 may determine NO_x emissions in accordance with the emissions estimation protocol of 40 CFR 75, Subpart E [35 IAC 217.710(b)].
 - iii. Notwithstanding 35 IAC 217.710(a), Condition 7.1.8(b), the owner or operator of a combustion turbine that operates less than 350 hour per ozone control period may determine the heat input and NO_x emissions of the turbine as follows [35 IAC 217.710(c)]:
 - A. Heat input shall be determined from the metered fuel usage to the turbine or the calculated heat input determined as the product of the turbine's maximum hourly heat input and hours of operation as recorded by operating instrumentation on the turbine [35 IAC 217.710(c) (1)].
 - B. NO_x emissions shall be determined as the product of the heat input, as determined above, and the

appropriate default NO_x emission factors below
[35 IAC 217.710(c)(2)]:

0.7 lbs/mmBtu - Natural gas

1.2 lbs/mmBtu - Fuel oil

- e. i. Compliance with the fuel limits in Condition 7.1.6(a) is addressed by the records and reports required in Conditions 7.1.9 and 7.1.10.
- ii. Compliance with the emission limits in Conditions 5.6 and 7.1.6 is addressed by the records and reports required in Conditions 7.1.9 and 7.1.10 and from emission factors developed from the most recent approved stack test in accordance with Condition 7.1.7 (NO_x), standard emission factors (CO, VOM and PM/PM₁₀) and analysis of fuel sulfur content or standard factors (SO₂).

7.2 Diesel Engines (Subject to NESHAP - 40 CFR 63 Subpart ZZZZ)

7.2.1 Description

The diesel engines are process emission units used to start up turbines. The Permittee operates three (3) 635 Hp startup engines.

Note: This narrative description is for informational purposes only and is not enforceable.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
Engine #1, 2, and 3	Diesel startup engine Distillate: 635 Hp	1973	None

7.2.3 Applicable Provisions and Regulations

- a. The "affected diesel engines" for the purpose of these unit-specific conditions, are diesel engines described in Conditions 7.2.1 and 7.2.2.
- b. Pursuant to 35 IAC 212.123,
 - i. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit.
 - ii. The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 1000 ft radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c.
 - i. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.

7.2.4 Non-Applicability of Regulations of Concern

a. The affected diesel engines are not subject to the New Source Performance Standards (NSPS) for Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII, because the Permittee did not commence construction (date that construction commences is the date the engine is ordered by the Permittee) of the affected diesel engines after July 11, 2005 where the affected diesel engines are:

i. Manufactured after April 1, 2006 and are not fire pump engines, pursuant to 40 CFR 60.4200(a)(2)(i).

Note: To qualify for this non-applicability, the Permittee has certified that the diesel engines have not modified or reconstructed their diesel engines after July 11, 2005.

b. The affected diesel engines are excluded from certain requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines 40 CFR Part 63, Subpart ZZZZ, because the affected diesel engines are existing compression ignition (CI) stationary RICE, pursuant to 40 CFR 63.6590(b)(3), and do not have to meet the requirements of that Subpart or Subpart A, additionally no initial notification is necessary. Requirements necessary to maintain the exclusion, and therefore compliance with that Part, are found within this Section. Specifically, those requirements are not becoming an affected source pursuant to 40 CFR 63.6590.

c. The affected diesel engines are not subject to the Acid Rain Program, 40 CFR 72, because the affected diesel engines are non-utility units, as defined by 40 CFR 72.6(b)(8). Pursuant to 40 CFR 72.2, "utility unit" is defined as a unit owned or operated by a utility that serves a generator in any State that produces electricity for sale.

d. The affected diesel engines are not subject to 35 IAC 212.321 or 212.322, due to the unique nature of such units, a process weight rate can not be set so that such rules can not reasonably be applied, pursuant to 35 IAC 212.323.

e. The affected diesel engines are not subject to 35 IAC 216.121 because the affected diesel engines are not fuel combustion units, as defined by 35 IAC 211.2470.

f. i. The affected diesel engines are not subject to 35 IAC Part 217, Subpart Q: Stationary Reciprocating Internal Combustion Engines and Turbines, because the affected diesel engines are not stationary

reciprocating internal combustion engines listed in Appendix G of that Part, pursuant to 35 IAC 217.386.

- ii. The affected diesel engines are not subject to 35 IAC 217.141 because the affected diesel engines are not fuel combustion units, as defined by 35 IAC 211.2470.
- g. The affected diesel engines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected diesel engines does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 Control Requirements and Work Practices

- a. The Permittee shall follow good operating practices for the affected engines, including periodic inspection, routine maintenance and prompt repair of defects.
- b. Distillate fuel oil shall be the only fuel fired in the affected diesel engines.
- c. The Permittee shall not utilize distillate fuel oils with a sulfur content greater than 0.3% sulfur by weight.
- d. The Illinois EPA shall be allowed to sample all fuels stored at the source.

7.2.6 Production and Emission Limitations

Production and emission limitations are not set for the affected diesel engines. However, there are source-wide production and emission limitations set forth in Condition 5.6.

7.2.7 Testing Requirements

- a. i. Upon written request by the Illinois EPA, the Permittee shall have the opacity of the exhaust from the affected diesel engine(s) tested during representative operating conditions as 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.
- ii. Such testing shall be conducted for specific diesel engine(s) within 70 calendar days of the request, or on the date diesel engine(s) next operates, or on the date agreed upon by the Illinois EPA, whichever is later.
- iii. 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.

- iv. 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).
 - v. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.
 - vi. 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.
 - vii. 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 diesel engine operating conditions.
 - F. Raw data.
 - G. Opacity determinations.
 - H. Conclusions.
- b. i. In the event that the fuel oil supplier is unable to provide the sulfur content of the fuel oil supply for the affected diesel engines, the Permittee shall have the sulfur content of the oil supply to the affected diesel engines, in lbs/mmBtu, determined from an analysis of representative sample of the oil supply, as follows, pursuant to Section 39.5(7)(d) of the Act:
- A. From a sample taken no later than 90 days after first operating the affected diesel engines pursuant to this permit, provided, however, that if such sample is taken following operation of the affected diesel engines, the sample shall be taken prior to adding more oil to the storage tank.

- B. From a sample taken no later than 30 days after acceptance of a shipment of fuel whose sulfur content would not meet Condition 7.2.3(c) based upon supplier data, provided however, that if the affected diesel engines are operated following acceptance of such a shipment, the sample shall be taken prior to adding a subsequent shipment of oil to the relevant storage tank.
 - C. From a sample taken no later than 30 days after a request for such a sample is made by the Illinois EPA, provided, however, that such sample shall be taken prior to adding more oil to the relevant storage tank.
- ii. Sampling and analysis, including that which forms the basis for the suppliers' data, shall be conducted using methods that would be acceptable under the federal 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 SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units e.g., ASTM D4057-88 and ASTM D129-91.

Note: Condition 7.2.7(b)(ii) is for fuel testing methodology only, and is in no way intended to subject the source to those provisions.

7.2.8 Monitoring Requirements

- a.
 - i. If an affected diesel engine is routinely operated or exercised to confirm that the affected diesel engine will operate when needed, the operation and opacity of the affected diesel engine shall be formally observed by operating personnel for the affected diesel engine or a member of Permittee's environmental staff on a regular basis to assure that the affected diesel engine is operating properly, which observations shall be made at least every six months.
 - ii. If an affected diesel engine is not routinely operated or exercised, i.e., the time interval between operation of an affected diesel engine is typically greater than six months, the operation and opacity of the affected diesel engine shall be formally observed as provided above each time the Permittee carries out a scheduled exercise of the affected diesel engine.
 - iii. The Permittee shall also conduct formal observations of operation and opacity of an affected diesel engine

upon written request by the Illinois EPA. With the agreement of the Illinois EPA, the Permittee may schedule these observations to take place during periods when it would otherwise be operating the affected diesel engine.

Note: The "formally observation" required above is not intended to be a USEPA Test Method 9 opacity test, nor does the observation require a USEPA Test Method 9 certified observer. It is intended to be performed by personnel familiar with the operation of the affected diesel engines who would be able to make a determination based from the affected diesel engines who would be able to make a determination based from the observed opacity as to whether of not the affected diesel engine was running properly, and subsequently initiate a corrective action if necessary.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected diesel engine to demonstrate compliance with Conditions 5.6.1 and 7.2.3, pursuant to Section 39.5(7)(b) of the Act:

- a. i. An operating log for each affected diesel engine, which shall include the following information:
 - A. Information for each time the affected diesel engine is operated, with date, time, duration, and purpose (i.e., exercise or power service). Monthly and annual records of hours of operation of each engine and total hours of operation.
 - B. Information for the observations conducted pursuant to Condition 7.2.8(a) or 7.2.7(a), with date, time, personnel, and findings.
 - I. The Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9 for an affected diesel engine that it conducts or that are conducted on its behalf by individuals who are qualified to make such observations for Condition 7.2.7(a). 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.

- II. The Permittee shall keep records for all formal observations of opacity conducted pursuant to Condition 7.2.8(a). For each occasion on which observations are made, these records shall include the date, time, identity of the observer, a description of the various observations that were made, whether or not the affected diesel engine was running properly, and whether or not corrective action is necessary and was subsequently initiated.
- C. Information identifying any deviation from Condition 7.2.5(b).
 - ii. A maintenance and repair log for each affected diesel engine and associated equipment, listing activities performed with date.
 - iii. The Permittee shall keep records of good operating practices for each affected diesel engine, as defined in Condition 7.2.5(a).
- b. Fuel usage for the affected diesel engines:
 - i. Total usage of fuel oil for the affected diesel engines, gallons/month and gallons/year.
- c. The following records related to the sulfur content of the oil fuel supply and SO₂ emissions of the affected diesel engines:
 - i. Records for each shipment of fuel for the affected diesel engines, including date, supplier, quantity (in gallons), sulfur content, and whether the SO₂ emissions from the burning of such fuel would meet the standard in Condition 7.2.3(c).
 - ii. The Permittee shall maintain records of the sulfur content of the fuel oil supply to the affected diesel engines, based on the weighted average of material in the storage tank, or the sulfur content of the supply shall be assumed to be the highest sulfur content in any shipment in the tank.
- d. Emissions from each affected diesel engine (i.e., NO_x, CO, SO₂, VOM, and PM) in tons/month and tons/year with supporting calculations and data as required by Condition 7.2.9.

7.2.10 Reporting Requirements

a. Reporting of Deviations

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

- i. Emissions of opacity, SO₂, from the affected diesel engines in excess of the limits specified in Conditions 7.2.3 within 30 days of such occurrence.
- ii. Operation of the affected diesel engines in noncompliance with the requirements specified in Condition 7.2.5 within 30 days of such occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected diesel engines.

7.2.12 Compliance Procedures

a. Compliance with the PM emission limitations of Conditions 7.2.3(b) is addressed by the requirements of Condition 7.2.5(a), the testing requirements in Condition 7.2.7(a), the monitoring requirements of Condition 7.2.8(a), the records required in Condition 7.2.9(a), and the reports required in Condition 7.2.10(a).

b. i. Compliance with the SO₂ emission limitation of Condition 7.2.3(c)(i) is addressed by the requirements of Condition 7.2.5, the testing requirements in Condition 7.2.7(b), and the records and reports required in Conditions 7.2.9(b) and (c) and 7.2.10(a).

ii. For this purpose, complete conversion of sulfur into SO₂ shall be assumed, e.g., SO₂ emissions in lb/mmBtu are twice the sulfur content of the fuel supply, in lb/mmBtu, using the following equation:

$$\text{SO}_2 \text{ ppm} = \frac{\text{Fuel sulfur content (lb/mmBtu)} \times 2 \times 1/64 \times 385.2 \times 1,000,000}{\text{Engine exhaust rate factor (scf/mmBtu)}}$$

Note: Stoichiometric combustion of distillate oil with the maximum available sulfur content, i.e., 1.0 percent, would result in an SO₂ concentration in the exhaust that is well below the 2000 ppm limit in Condition 7.2.3(c)(i), i.e., only about 500 ppm, based on 10,320 scf/mmBtu, the F-factor for oil in USEPA's Reference Method 19.

c. Compliance with the emission limits in Conditions 5.6 2 are addressed by the records and reports required in Conditions 7.2.9 and 7.2.10 and the emission factors and formulas listed below if suitable manufacture's emission rate data is not available:

i. Emission factors for the affected engines greater than 600 horsepower:

<u>Pollutant</u>	<u>Emission Factors</u>	
	<u>(lb/mmBtu)</u>	<u>(lb/hp-hr)</u>
	<u>Fuel Input</u>	<u>Power Output</u>
VOM	0.35	2.46×10^{-03}
PM	0.31	2.20×10^{-03}
SO ₂	0.29	2.05×10^{-03}
NO _x	4.41	0.031
CO	0.95	6.68×10^{-03}

The heat content of distillate fuel oil shall be assumed to be 137,030 Btu/gal as per AP-42.

Emissions = Distillate Fuel Oil Usage x Heat Content of Fuel Oil x Emission Factor

The emission factors are for Large Stationary Diesel and All Stationary Dual-Fuel Engines from AP-42 Section 3.4 (dated 10/96).

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after _____ **Error! Bookmark not defined.** (the date of issuance of the proposed permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

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 conditions 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 Sections 5 or 7 of this permit [Section 39.5(7) (f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7) (a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;
- e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The

test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit 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 Unit

Illinois Environmental Protection Agency
Bureau of Air
Compliance & Enforcement Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

- ii. Illinois EPA - Air Quality Planning Section

Illinois Environmental Protection Agency
Bureau of Air
Air Quality Planning Section (MC 39)
P.O. Box 19276
Springfield, Illinois 62794-9276

iii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

iv. 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)
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 CAA (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 revision or combination of 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.

9.1.2 In particular, this permit does not alter or affect the following [Section 39.5(7)(j)(iv) of the Act]:

- 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, pursuant to Section 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action; permit termination, revocation and reissuance, or 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 Illinois Pollution Control 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 there under.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents as may be required by law and in accordance with constitutional limitations, 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 applicable requirements; 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 regulated activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply with Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. At 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, Air Quality Planning Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7) (p) (v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Unit, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the

certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act and applicable regulations [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as Attachment 1 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 [Section 39.5(7)(k) of the Act]:

- 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 [Section 39.5(7)(k)(iv) of the Act].

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 statements were made in establishing the emission standards or limitations, or other terms or conditions of this permit.

- 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 the permit, other portions of the 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 [Section 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

Attachment 1 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: _____

Attachment 2 Emissions of Particulate Matter from Process Emission Units

- a. New Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972 [35 IAC 212.321].
- i. 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)].

- ii. 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,

- A. Up to process weight rates of 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.214	2.54
B	0.534	0.534

- B. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	11.42	24.8
B	0.16	0.16

iii. Limits for Process Emission Units For Which Construction or Modification Commenced On or After April 19, 1972 [35 IAC 212.321(c)]:

Metric P <u>Mg/hr</u>	E <u>kg/hr</u>	English P <u>T/hr</u>	E <u>lb/hr</u>
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

iv. For process weight rates of less than 100 pounds per hour, the allowable rate is 0.5 pounds per hour [35 IAC 266.110].

b. Existing Process Emission Units for Which Construction or Modification Prior to April 14, 1972 [35 IAC 212.322].

- i. 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 units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].
- ii. 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,

A. Up to process weight rates up to 27.2 Mg/hr (30 T/hr):

	<u>Metric</u>	<u>English</u>
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.985	4.10
B	0.67	0.67
C	0	0

B. For process weight rate in excess of 27.2 Mg/hr (30 T/hr):

	<u>Metric</u>	<u>English</u>
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

iii. Limits for Process Emission Units For Which Construction or Modification Commenced Prior to April 14, 1972 [35 IAC 212.322(c)]:

Metric P <u>Mg/hr</u>	E <u>kg/hr</u>	English P <u>T/hr</u>	E <u>lb/hr</u>
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

iv. For process weight rates of less than 100 pounds per hour, the allowable rate is 0.5 pounds per hour [35 IAC 266.110].

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

There are no specific emission units that require a CAM plan as identified in the Monitoring Requirements of Subsection 8 for each Section 7, Unit Specific Conditions for Specific Emission Units.

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 (199-CAAPP) and Fee Determination for Construction Permit Application form (197-FEE):

www.epa.state.il.us/air/caapp/199-caapp.pdf

www.epa.state.il.us/air/permits/197-fee.pdf

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