PROPOSED CAAPP PERMIT
January 29, 2008

217/782-2113

RENEWAL
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Calumet Energy Team Project
Attn: Kevin R. Cahill, HSE Director
11653 South Torrence Avenue
Chicago, Illinois 60617-5601

I.D. No.: 031600GHA
Application No.: 03030094

Date Received: December 3, 2007
Date Issued:
Expiration Date[1]:

Operation of: Calumet, Electric generation
Source Location: 11653 South Torrence Avenue, Chicago, Cook County, IL 60617
Responsible Official: Kevin R. Cahill, HSE Director

This permit is hereby granted to the above-designated Permittee to OPERATE a 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 1
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

Calumet Energy Team Project
11653 South Torrence Avenue
Chicago, Illinois 60617-5601
773/221-5289

I.D. No.: 031600GHA
County: Cook
Standard Industrial Classification: 4911, Electric Generation

### 1.2 Owner/Parent Company

Calumet Energy Team L.L.C.
11601 South Torrence Avenue
Chicago, Illinois 60617

### 1.3 Operator

Calumet Energy Team Project
11653 South Torrence Avenue
Chicago, Illinois 60617-5601

Plant Manager
773/221-5289

### 1.4 Source Description

Calumet Energy is located at 11653 South Torrence Avenue, Chicago. The source utilizes two natural gas or distillate fuel oil turbines to generate 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”.

b. This permit contains Title I conditions that revise Title I requirements established in permits previously issued for this source, which conditions are specifically designated as “T1R”.

## 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)].

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 218.301, 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 218.122, 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 |
|---|---|---|---|
| CT 01-02 | Two 200 MW Natural Gas or Distillate Fuel Oil Fired Turbines (2,080 mmBtu/hr) | June 2002 | Dry Low $NO_x$ for Natural Gas and Water Injection System |
| Engine #1 | Diesel Firepump Distillate: 208 Hp | 2002 | 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.

5.1.2 This permit is issued based on the source requiring a CAAPP permit as an "affected source" for the purposes of Acid Deposition Control, Title IV of the Clean Air Act, pursuant to 40 CFR 70.3(a)(4).

### 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 nonattainment for the National Ambient Air Quality Standards for ozone (moderate nonattainment) and $PM_{2.5}$ and attainment or unclassifiable for all other criteria pollutants (CO, lead, $NO_2$, $PM_{10}$, $SO_2$).

### 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.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

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 Fugitive Particulate Matter Operating Program

a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive

particulate matter emissions [35 IAC 212.309(a)]. The Permittee shall comply with the fugitive particulate matter operating program, submitted to the Illinois EPA and incorporated by reference into this permit, and any amendments to the program submitted pursuant to paragraph b below.

b. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].

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

5.3.4 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

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

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

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

5.3.5 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.

5.3.6 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.

5.3.7 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.

d. Any subsequent revisions of the plan shall also be sent to the Chicago Department of Environmental Control.

5.3.8 $PM_{10}$ Contingency Measure Plan

Should the actual annual source-wide emissions of $PM_{10}$ equal or exceed 15 tons, then the Permittee shall prepare and submit a contingency measure plan reflecting the $PM_{10}$ emission reductions as set forth in 35 IAC 212.701 and 212.703. The Permittee shall submit such plan to the Illinois EPA for review and approval within ninety (90) days after the date this source becomes subject to this requirement. Such plan will be incorporated by reference into this permit and shall be implemented by the Permittee in accordance with 35 IAC 212.704 following notification by the Illinois EPA. The source shall comply with the applicable requirements of 35 IAC Part 212, Subpart U. This permit may also have to be revised or reopened to address this regulation (see Condition 9.12.2).

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) | 15.4 |
| Sulfur Dioxide ($SO_2$) | 24.8 |
| Particulate Matter (PM) | 9.0 |
| Nitrogen Oxides ($NO_x$) | 240.0 |
| HAP, not included in VOM or PM | --- |
| Total | 289.2 |

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 September 30th.

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 <u>Source-Wide Reporting Requirements</u>

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

### 6.1 Clean Air Interstate Rule (CAIR) Program

#### 6.1.1 Applicability

This source is an affected source for purposes of the Clean Air Interstate Rule ("CAIR") Program and the following emission units at the source are affected CAIR units:

Turbines CT 01-02

Note: Under Section 110 of the Clean Air Act (CAA), the USEPA adopted the Clean Air Interstate Rule or CAIR, 40 CFR Part 96, to reduce and permanently cap emissions of sulfur dioxide ($SO_2$), and nitrogen oxides ($NO_x$) from electric power plants that significantly contribute to fine particulate and ozone in the ambient air in the Eastern United States. To implement CAIR in Illinois, the Illinois EPA adopted 35 IAC Part 225 Subparts A, C, D and E. For purposes of this permit, these requirements are referred to as CAIR provisions.

#### 6.1.2 Applicable CAIR Requirements for $SO_2$ Emissions

The owners and operators of this source shall not violate applicable CAIR provisions, in 35 IAC Part 225, Subpart C. $SO_2$ emissions from the affected CAIR units shall not exceed the equivalent number of allowances that the source lawfully holds under these CAIR provisions.

Note: CAIR affected sources must hold CAIR $SO_2$ allowances to account for the emissions from the affected CAIR units. Each CAIR $SO_2$ allowance is a limited authorization to emit during the respective CAIR $SO_2$ annual period or subsequent period. The possession of $SO_2$ allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

#### 6.1.3 Applicable CAIR Requirements for $NO_x$ Emissions

The owners and operators of this source shall not violate applicable CAIR provisions, in 35 IAC Part 225, Subpart D. $NO_x$ emissions from the affected CAIR units shall not exceed the equivalent number of allowances that the source lawfully holds under these CAIR provisions.

Note: CAIR affected sources must hold CAIR $NO_x$ allowances to account for the emissions from the affected CAIR units. Each CAIR $NO_x$ allowance is a limited authorization to emit during the respective CAIR $NO_x$ annual period or subsequent period. The possession of $NO_x$ allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

6.1.4 Applicable CAIR Requirements for $NO_x$ Ozone Season Emissions

The owners and operators of this source shall not violate applicable CAIR provisions, in 35 IAC Part 225, Subpart E. Seasonal $NO_x$ emissions from the affected CAIR units shall not exceed the equivalent number of allowances that the source lawfully holds under these CAIR provisions.

Note: CAIR affected sources must hold CAIR $NO_x$ ozone season allowances to account for the emissions from the affected CAIR units. Each CAIR $NO_x$ ozone season allowance is a limited authorization to emit during the respective CAIR $NO_x$ ozone season or subsequent season. The possession of $NO_x$ allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

6.1.5 Monitoring, Recordkeeping and Reporting

The owners and operators of the source and, to the extent applicable, their designated representative, shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by 35 IAC Part 225 Subparts C, D and E.

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

6.1.6 CAIR Permit

The owners and operators of the source shall comply with the terms and conditions of the source's CAIR permit (attached).

Note: This source is subject to a CAIR permit, which was issued pursuant to 35 IAC Part 225.320, 225.420 and 225.520. CAIR sources must be operated in compliance with their CAIR permits. This source's CAIR permit is incorporated into this CAAPP permit with a copy of the current CAIR permit included as an attachment to this permit. Revisions and modifications to the CAIR permit are governed by Section 39.5 of the Act. Accordingly, revision or renewal of the CAIR permit may be handled separately from this CAAPP permit and a copy of the new CAIR permit may be included in this permit by Administrative Amendment.

6.1.7 Coordination with other Requirements

a. This permit does not contain any conditions that are intended to interfere with or modify the requirements of 35 IAC Part 225 C, D, and E, 40 CFR Part 96; or Title IV of the CAA. In particular, this permit does not restrict the flexibility of the owners and operators of this source to comply with CAIR provisions, including the ability to obtain CAIR $NO_x$ allowances from Illinois' Clean Air Set Aside (CASA) for qualifying projects.

b. Where another applicable requirement of the CAA is more stringent than an applicable requirement of 35 IAC Part 225, Subparts C, D, or E; 40 CFR Part 96; or Title IV of the CAA, all requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements.

## 6.2 Acid Rain

### 6.2.1 Applicability

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

Turbines CT 01-02

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

### 6.2.2 Applicable Emission Requirements

The owners and operators of the source shall not violate applicable Title IV provisions. $SO_2$ emissions of the affected units shall not exceed any allowances that the source lawfully holds under Title IV provisions [Section 39.5(7)(g) and (17)(l) of the Act].

Note: Affected sources must hold $SO_2$ allowances to account for the $SO_2$ emissions from affected units at the source that are subject to Title IV provisions. Each allowance is a limited authorization to emit up to one ton of $SO_2$ emissions during or after a specified calendar year. The possession of allowances does not authorize exceedances of applicable emission standards or violations of ambient air quality standards.

### 6.2.3 Monitoring, Recordkeeping and Reporting

The owners and operators of the source and, to the extent applicable, their designated representative, shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by Title IV provisions, including 40 CFR Part 75 [Section 39.5(7)(b) and 17(m) of the Act].

### 6.2.4 Acid Rain Permit

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

Note: The source is subject to an Acid Rain permit, which was issued pursuant to Title IV provisions, including Section 39.5(17) of the Act. Affected sources must be operated in compliance with their Acid Rain permits. This source’s Acid Rain permit is incorporated by reference into this permit and a copy of the current Acid Rain permit is included as Attachment 6 of this permit. Revisions and modifications of this Acid Rain permit, including administrative amendments and automatic

amendments (pursuant to Sections 408(b) and 403(d) of the CAA or regulations thereunder) are governed by Title IV provisions, as provided by Section 39.5(13)(e) of the Act. Accordingly, revision or renewal of the Acid Rain permit may be handled separately from this CAAPP permit and a copy of the new Acid Rain permit may be included in this permit by administrative amendment.

6.2.5 Coordination with Other Requirements

a. This permit does not contain any conditions that are intended to interfere with or modify the requirements of Title IV provisions. In particular, this permit does not restrict the flexibility under Title IV provisions of the owners and operators of this source to amend their Acid Rain compliance plan [Section 39.5(17)(h) of the Act].

b. Where another applicable requirement of the CAA is more stringent than an applicable requirement of Title IV provisions, both requirements are incorporated into this permit and are enforceable and the owners and operators of the source shall comply with both requirements [Section 39.5(7)(h) of the Act].

## 6.3 Emissions Reduction Market System (ERMS)

### 6.3.1 Description of ERMS

The ERMS is a “cap and trade” market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold “allotment trading units” (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources’ CAAPP permits. These allotments are established from historical VOM emissions or “baseline emissions” lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source should have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account’s balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources’ transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 IAC 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 IAC 205.500 and 35 IAC 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the “Alternative Compliance Market Account” (ACMA) (35 IAC 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 IAC 205.630).

### 6.3.2 Applicability

This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 IAC Part 205, pursuant to 35 IAC 205.200. This is based on the source’s actual VOM emissions during the seasonal

allotment period from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.

6.3.3 Recordkeeping and Reporting

a. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:

   i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;

   ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and

   iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.

b. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in its CAAPP permit.

## 7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Natural Gas or Distillate Fuel Oil-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 |
|---|---|---|---|
| CT 01-02 | Two 200 MW Natural Gas or Distillate Fuel Oil Fired Turbines (2,080 mmBtu/hr) | 2000 | Dry Low $NO_x$ for Natural Gas and Water Injection System |

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. The affected turbine is subject to the NSPS for Stationary Gas Turbines, 40 CFR 60 Subparts A and GG, because the heat input at peak load is equal to or greater than 10.7 gigajoules per hour (10 mmBtu/hr), based on the lower heating value of the fuel fired and the affected turbine commenced construction, modification, or reconstruction after October 3, 1977. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

i. Standard for Nitrogen Oxides:

Pursuant to 40 CFR 60.332(b), electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of 40 CFR 60.332(a)(1). Pursuant to 40 CFR 60.332(a)(1), no owner or operator of an affected turbine shall cause to be discharged into the atmosphere from such gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

Where:

STD = Allowable $NO_x$ emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = Manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

F = $NO_x$ emission allowance for fuel-bound nitrogen calculated from the nitrogen content of the fuel as follows:

| Fuel-bound nitrogen (percent by weight) | F ($NO_x$ percent by volume) |
|---|---|
| $N \leq 0.015$ | 0 |
| $0.015 < N \leq 0.1$ | 0.04 (N) |
| $0.1 < N \leq 0.25$ | 0.04 + 0.0067(N - 0.1) |
| $N > 0.25$ | 0.005 |

Where:

N = The nitrogen content of the fuel (percent by weight) determined in according with Condition 7.1.8(b).

ii. Standard for Sulfur Dioxide:

Pursuant to 40 CFR 60.333, on and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, every owner or operator subject to the provision of 40 CFR 60 Subpart GG shall comply with one or the other of the following conditions:

No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis, pursuant to 40 CFR 60.333(a).

No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw), pursuant to 40 CFR 60.333(b).

e. i. No owner or operator shall cause or allow the emissions of $NO_x$ into the atmosphere from the affected turbine to exceed 0.25 lbs/mmBtu of actual heat input during each ozone control period from May 1 through September 30, based on a ozone control period average, for that unit [35 IAC 217.706(a)].

ii. Notwithstanding the above emission limitation of 35 IAC 217.706(a), the affected turbine 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 thereunder, shall comply with both the requirements of 35 IAC 217 Subpart V and that more stringent emission limitation [35 IAC 217.706(b)].

7.1.4 <u>Non-Applicability of Regulations of Concern</u>

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 $SO_2$, 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.

7.1.5 <u>Control Requirements and Work Practices</u>

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. Unless specified on a more frequent basis by manufacturer's written instructions, an inspection of emissions-related components shall be completed quarterly. Inspections shall be conducted in accordance with manufacturer's written instructions.

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 and distillate fuel oil shall be the only fuels in the affected turbines.

c. The affected turbines shall be equipped, operated, and maintained with dry low $NO_x$ (DLN) burners for natural gas and water injection system for distillate fuel to control $NO_x$ emissions.

d. Distillate fuel oil with a sulfur content greater than 0.05 weight percent shall not be fired in the affected turbines.

The above limitation was established in Permit 99110107 [T1].

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. i. The affected turbines, in total, shall not fire more than 4.16 million ft3 per hour and 4,870 million ft3 per year of natural gas. Compliance with the annual limit shall be determined from a running total of 12 months of data [T1R].

The above limitations contain revisions to previously issued Permit 99110107. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the hourly usage limit has been revised to be consistent with the hourly emission limits [T1R].

ii. The usage of fuel oil, total in the affected turbines, shall not exceed 8,000,000 gallons per year. This operational limitation is established to address PM emissions associated with use of fuel oil in the affected turbines. Compliance with this limit shall be determined from a running total of 12 months of data. The above limitation was established in Permit 99110107 [T1].

b. Hourly emissions from each affected turbine shall not exceed the following limits, except when ice fog is deemed a traffic hazard in accordance with 40 CFR 60.332(f):

| Pollutant | Natural Gas Fired (Lb/Hour) | Distillate Fuel Oil Fired (Lb/Hour) |
|---|---|---|
| $NO_x$ | 170.0 | 317.0 |
| CO | 100.0 | 111.0 |
| VOM | 10.0 | 11.0 |
| $SO_2$ | 1.5 | 99.0 |
| $PM/PM_{10}$ | 6.3 | 7.0 |

c. Total annual emissions from the affected turbines combined shall not exceed the following limitations:

| Pollutant | (Ton/Year) |
|---|---|
| $NO_x$ | 240.0 |
| CO | 58.6 |
| VOM | 15.0 |
| $PM/PM_{10}$ | 9.0 |
| $SO_2$ | 24.8 |

d. 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].

e. The above limitations were established in Permit 99110107, 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 ($O_2$) 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 |

ii. A. Pursuant to 40 CFR 60.335(b), the owner or operator shall determine compliance with the applicable nitrogen oxides emission limitation in 40 CFR 60.332 and shall meet the performance test requirements of 40 CFR 60.8 as follows:

For each run of the performance test, the mean nitrogen oxides emission concentration ($NO_{Xo}$) corrected to 15 percent $O_2$ shall be corrected to ISO standard conditions using the following equation. Notwithstanding this requirement, use of the ISO correction equation is optional for: Lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and units equipped with add-on emission control devices, pursuant to 40 CFR 60.335(b)(1):

$$NO_x = (NO_{Xo})(P_r/P_o)0.5\ e19(H_o-0.00633)\ (288°K/Ta)1.53$$

Where:

$NO_x$ = emission concentration of $NO_x$ at 15 percent $O_2$ and ISO standard ambient conditions, ppm by volume, dry basis

$NO_{Xo}$ = mean observed $NO_x$ concentration, ppm by volume, dry basis, at 15 percent $O_2$

$P_r$ = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg

$P_o$ = observed combustor inlet absolute pressure at test, mm Hg

$H_o$ = observed humidity of ambient air, g $H_2O$/g air

e = transcendental constant, 2.718

$T_a$ = ambient temperature, °K

The 3-run performance test required by 40 CFR 60.8 must be performed within ± 5 percent at

30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. If the turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel. Notwithstanding these requirements, performance testing is not required for any emergency fuel (as defined in 40 CFR 60.331), pursuant to 40 CFR 60.335(b)(2).

If water or steam injection is used to control $NO_x$ with no additional post-combustion $NO_x$ control and the owner or operator chooses to monitor the steam or water to fuel ratio in accordance with 40 CFR 60.334(a), then that monitoring system must be operated concurrently with each EPA Method 20, ASTM D6522-00 (incorporated by reference, see 40 CFR 60.17), or EPA Method 7E run and shall be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable 40 CFR 60.332 $NO_x$ emission limit, pursuant to 40 CFR 60.335(b)(4).

If the owner or operator elects to install a CEMS, the performance evaluation of the CEMS may either be conducted separately (as described in paragraph (b)(7)of this section) or as part of the initial performance test of the affected unit, pursuant to 40 CFR 60.335(b)(6).

Pursuant to 40 CFR 60.335(b)(7), if the owner or operator elects to install and certify a $NO_x$ CEMS under 40 CFR 60.334(e), then the initial performance test required under 40 CFR 60.8 may be done in the following alternative manner:

Perform a minimum of 9 reference method runs, with a minimum time per run of 21 minutes, at a single load level, between 90 and 100 percent of peak (or the highest physically achievable) load, pursuant to 40 CFR 60.335(b)(7)(i).

Use the test data both to demonstrate compliance with the applicable $NO_x$ emission limit under 40 CFR 60.332 and to provide the required reference method data for the RATA of

the CEMS described under 40 CFR 60.334(b) , pursuant to 40 CFR 60.335(b)(7)(ii).

The requirement to test at three additional load levels is waived, pursuant to 40 CFR 60.335(b)(7)(iii).

If the owner or operator elects under 40 CFR 60.334(f) to monitor combustion parameters or parameters indicative of proper operation of $NO_x$ emission controls, the appropriate parameters shall be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in 40 CFR 60.334(g), pursuant to 40 CFR 60.335(b)(8).

Pursuant to 40 CFR 60.335(b)(10), if the owner or operator is required under 40 CFR 60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:

For gaseous fuels, ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are incorporated by reference, see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator, pursuant to 40 CFR 60.335(b)(10)(ii).

The fuel analyses required under paragraphs (b)(9) and (b)(10) of this section may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency, pursuant to 40 CFR 60.335(b)(11).

B. Pursuant to 40 CFR 60.335(c), the owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

Instead of using the equation in paragraph (b)(1) of this section, manufacturers may

develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in 40 CFR 60.8 to ISO standard day conditions, pursuant to 40 CFR 60.335(c)(1).

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 $ft^3$).

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 30 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. The affected turbine shall comply with the applicable monitoring requirements of 40 CFR 60.334(h), below. Monitoring of fuel nitrogen content shall not be required while the facility does not claim an allowance for fuel-bound nitrogen. Monitoring for sulfur content in fuel is not required while natural gas is the only fuel fired in the affected turbine and the requirements of 40 CFR 60.334(h)3(i) or (ii) are met.

Pursuant to 40 CFR 60.334(h), the owner or operator of any stationary gas turbine subject to the provisions of this subpart:

Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in paragraph (h)(3)of this section. The sulfur content of the fuel must be determined using total sulfur methods described in 40 CFR 60.335(b)(10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which are incorporated by reference-see 40 CFR 60.17), which measure the major sulfur compounds may be used, pursuant to 40 CFR 60.334(h)(1); and

Shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen (i.e., if an F-value greater than zero is being or will be used by the owner or operator to calculate STD in 40 CFR 60.332). The nitrogen content of the fuel shall be determined using methods described in 40 CFR 60.335(b)(9) or an approved alternative, pursuant to 40 CFR 60.334(h)(2).

Pursuant to 40 CFR 60.334(h)(3), notwithstanding the provisions of paragraph (h)(1) of this section, the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:

The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less, pursuant to 40 CFR 60.334(3)(i); or

Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20

grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required, pursuant to 40 CFR 60.334(h)(3)(ii).

c. Should the operation of the affected turbine exceed the limitations of the definition of a gas-fired peaking unit in 40 CFR 75, the source owner or operator shall install the appropriate Continuous Monitoring System(s) on the affected turbine by December 31 of the following calendar year, as defined in 40 CFR 75, in order to remain in compliance with the provisions of the Acid Rain Program.

d. 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

e. 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. The sulfur content of the natural gas used to fire the turbines as determined in accordance with Condition 7.1.8(b).

iii. A copy of the Final Report(s) for emission testing conducted pursuant to Condition 7.1.7.

iv. Copies of opacity determinations taken for the source by qualified observer(s) using USEPA Method 9.

v. Records documenting its periodic review of its operating procedures as required by Condition 7.1.5(a).

vi. 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 and dry low $NO_x$ combustors, 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: gas fired in scf/month, and mmscf/year, and oil fired in 1,000 gallon/month and oil fired in 1,000 gallon/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."

c. Pursuant to 40 CFR 60.7(c) and 40 CFR 60.334(j), a report shall be submitted on a semi-annual basis, postmarked by the 30th day following the end of each six-month period. This report shall contain information on any one-hour period when the average water to fuel ratio falls below the ratio needed to show compliance. For such periods, the report shall include the actual water to fuel ratio, average fuel consumption, ambient conditions and turbine load.

d. 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).

e. Pursuant to 40 CFR 60.7(c) and 40 CFR 60.334(j), a report shall be submitted on a semi-annual basis. This report shall contain information on excess emissions and monitoring system downtime reports in accordance with 40 CFR 60.7(c) and 40 CFR 60.334(j).

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 $SO_2$ 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 $SO_2$ 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(e) 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(d), 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(d), 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 the continuous NOx monitoring requirements in Condition 7.1.8 or 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 $PM/PM_{10}$) and analysis of fuel sulfur content or standard factors ($SO_2$).

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

### 7.2.1 Description

The diesel engine is a process emission units used to drive a fire pump. The Permittee operates one (1) 208 Hp diesel fire pump.

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 | Diesel Firepump Distillate: 208 Hp | 2002 | None |

### 7.2.3 Applicable Provisions and Regulations

a. The “affected diesel engine” for the purpose of these unit-specific conditions, is the diesel engine 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 engine 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 engine after July 11, 2005.

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

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

e. i. The affected diesel engine are not subject to 35 IAC Part 217, Subpart Q: Stationary Reciprocating Internal Combustion Engines and Turbines, because the affected diesel engine is not stationary reciprocating internal combustion engines listed in Appendix G of that Part, pursuant to 35 IAC 217.386.

ii. The affected diesel engine are not subject to 35 IAC 217.141 because the affected diesel engine is not fuel combustion units, as defined by 35 IAC 211.2470.

f. The affected diesel engine is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected diesel engine 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 diesel engine, including periodic inspection, routine maintenance and prompt repair of defects.

b. Distillate fuel oil shall be the only fuel fired in the affected diesel engine.

c. 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 engine. 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 engine, the Permittee shall have the sulfur content of the oil supply to the affected diesel engine, 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 engine pursuant to this permit, provided, however, that if such sample is taken following operation of the affected diesel engine, 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 engine is 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 $SO_2$ 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 engine who would be able to make a determination based from the affected diesel engine 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 engine:

i. Total usage of fuel oil for the affected diesel engine, gallons/month and gallons/year.

c. The following records related to the sulfur content of the oil fuel supply and $SO_2$ emissions of the affected diesel engine:

i. Records for each shipment of fuel for the affected diesel engine, including date, supplier, quantity (in gallons), sulfur content, and whether the $SO_2$ 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 engine, 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, $SO_2$, VOM, and PM) in tons/month and tons/year with supporting calculations and data as required by Condition 7.2.9.

7.2.10 <u>Reporting Requirements</u>

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected diesel engine 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 engine in excess of the limits specified in Conditions 7.2.3 within 30 days of such occurrence.

ii. Operation of the affected diesel engine 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 engine.

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 $SO_2$ 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 $SO_2$ shall be assumed, e.g., $SO_2$ emissions in lb/mmBtu are twice the sulfur content of the fuel supply, in lb/mmBtu, using the following equation:

$$SO_2 \text{ ppm} = \frac{\text{Fuel sulfur content (lb/mmBtu)} \times 2 \times 1/64 \times 385.2 \times 1{,}000{,}000}{\text{Engine exhaust rate factor (scf/mmBtu)}}$$

Note: Stoichiometric combustion of distillate oil with the maximum available sulfur content, i.e., 1.0 percent, would result in an $SO_2$ 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 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 diesel engines up to 600 horsepower:

| Pollutant | Emission Factors (lb/mmBtu) Fuel Input | (lb/hp-hr) Power Output |
|---|---|---|
| VOM | 0.35 | $2.46 \times 10^{-03}$ |
| PM | 0.31 | $2.20 \times 10^{-03}$ |
| $SO_2$ | 0.29 | $2.05 \times 10^{-03}$ |
| $NO_x$ | 4.41 | 0.031 |
| CO | 0.95 | $6.68 \times 10^{-03}$ |

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 Gasoline And Diesel Industrial Engines from AP-42 Section 3.3 (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 _____ (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 an affected source under Title IV of the CAA and is subject to requirements pursuant to Title IV of the CAA as specified in Section 6.2. To the extent that the federal regulations promulgated under Title IV of the CAA, are inconsistent with the requirements of this permit, the federal regulations promulgated under Title IV of the CAA shall take precedence pursuant to Section 39.5(17)(j) of the Act.

### 8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

a. The changes do not violate applicable requirements;

b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

   i. Describe the physical or operational change;

   ii. Identify the schedule for implementing the physical or operational change;

   iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

   iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

   v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the 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]:

| Monitoring Period | Report Due Date |
|---|---|
| January - June | September 1 |
| July - December | March 1 |

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

### 8.6.2 Test Notifications

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

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;

e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance 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
9511 West Harrison
Des Plaines, Illinois 60016

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 statement 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):

| | Metric | English |
|---|---|---|
| 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):

| | Metric | English |
|---|---|---|
| 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 Mg/hr | E kg/hr | English P T/hr | E lb/hr |
|---|---|---|---|
| 0.05 | 0.25 | 0.05 | 0.55 |
| 0.1 | 0.29 | 0.10 | 0.77 |
| 0.2 | 0.42 | 0.2 | 1.10 |
| 0.3 | 0.64 | 0.30 | 1.35 |
| 0.4 | 0.74 | 0.40 | 1.58 |
| 0.5 | 0.84 | 0.50 | 1.75 |
| 0.7 | 1.00 | 0.75 | 2.40 |
| 0.9 | 1.15 | 1.00 | 2.60 |
| 1.8 | 1.66 | 2.00 | 3.70 |
| 2.7 | 2.1 | 3.00 | 4.60 |
| 3.6 | 2.4 | 4.00 | 5.35 |
| 4.5 | 2.7 | 5.00 | 6.00 |
| 9.0 | 3.9 | 10.00 | 8.70 |
| 13.0 | 4.8 | 15.00 | 10.80 |
| 18.0 | 5.7 | 20.00 | 12.50 |
| 23.0 | 6.5 | 25.00 | 14.00 |
| 27.0 | 7.1 | 30.00 | 15.60 |
| 32.0 | 7.7 | 35.00 | 17.00 |
| 36.0 | 8.2 | 40.00 | 18.20 |
| 41.0 | 8.8 | 45.00 | 19.20 |
| 45.0 | 9.3 | 50.00 | 20.50 |
| 90.0 | 13.4 | 100.00 | 29.50 |
| 140.0 | 17.0 | 150.00 | 37.00 |
| 180.0 | 19.4 | 200.00 | 43.00 |
| 230.0 | 22.0 | 250.00 | 48.50 |
| 270.0 | 24.0 | 300.00 | 53.00 |
| 320.0 | 26.0 | 350.00 | 58.00 |
| 360.0 | 28.0 | 400.00 | 62.00 |
| 408.0 | 30.1 | 450.00 | 66.00 |
| 454.0 | 30.4 | 500.00 | 67.00 |

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):

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lb/hr |
| A | 1.985 | 4.10 |
| B | 0.67 | 0.67 |
| C | 0 | 0 |

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

| | Metric | English |
|---|---|---|
| P | Mg/hr | T/hr |
| E | kg/hr | lb/hr |
| A | 25.21 | 55.0 |
| B | 0.11 | 0.11 |
| C | - 18.4 | - 40.0 |

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

| Metric | | English | |
|---|---|---|---|
| P | E | P | E |
| Mg/hr | kg/hr | T/hr | lb/hr |
| 0.05 | 0.27 | 0.05 | 0.55 |
| 0.1 | 0.42 | 0.10 | 0.87 |
| 0.2 | 0.68 | 0.2 | 1.40 |
| 0.3 | 0.89 | 0.30 | 1.83 |
| 0.4 | 1.07 | 0.40 | 2.22 |
| 0.5 | 1.25 | 0.50 | 2.58 |
| 0.7 | 1.56 | 0.75 | 3.38 |
| 0.9 | 1.85 | 1.00 | 4.10 |
| 1.8 | 2.9 | 2.00 | 6.52 |
| 2.7 | 3.9 | 3.00 | 8.56 |
| 3.6 | 4.7 | 4.00 | 10.40 |
| 4.5 | 5.4 | 5.00 | 12.00 |
| 9.0 | 8.7 | 10.00 | 19.20 |
| 13.0 | 11.1 | 15.00 | 25.20 |
| 18.0 | 13.8 | 20.00 | 30.50 |
| 23.0 | 16.2 | 25.00 | 35.40 |
| 27.2 | 18.15 | 30.00 | 40.00 |
| 32.0 | 18.8 | 35.00 | 41.30 |
| 36.0 | 19.3 | 40.00 | 42.50 |
| 41.0 | 19.8 | 45.00 | 43.60 |
| 45.0 | 20.2 | 50.00 | 44.60 |
| 90.0 | 23.2 | 100.00 | 51.20 |
| 140.0 | 25.3 | 150.00 | 55.40 |
| 180.0 | 26.5 | 200.00 | 58.60 |
| 230.0 | 27.7 | 250.00 | 61.00 |
| 270.0 | 28.5 | 300.00 | 63.10 |
| 320.0 | 29.4 | 350.00 | 64.90 |
| 360.0 | 30.0 | 400.00 | 66.20 |
| 400.0 | 30.6 | 450.00 | 67.70 |
| 454.0 | 31.3 | 500.00 | 69.00 |

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

Attachment 5 Clean Air Interstate Rule (CAIR) Permit

217-782-2113

**CAIR PERMIT**

DRAFT

Calumet Energy Team Project
Attn: Greg Kunkel, Designated Representative
11653 South Torrence Avenue
Chicago, Illinois 60617-5601

Oris No.: 55296
IEPA I.D. No.: 301600GHA
Source/Unit: Calumet Energy Team Project, CT01-CT02
Date Received: October 26, 2007
Date Issued:
Effective Date: January 1, 2009
Expiration Date: December 31, 2013

**STATEMENT OF BASIS:**

In accordance with the Clean Air Act Interstate Rule (CAIR) $SO_2$ Trading Program, the CAIR $NO_x$ Annual Trading Program and the CAIR $NO_x$ Ozone Season Trading Program, and 35 IAC Part 225, Subparts C, D, and E, respectively, the Illinois Environmental Protection Agency is issuing this CAIR permit to Calumet Energy Team Project for the affected units at its electric power generation plant i.e., CT01-CT02

**ALLOCATION OF SULFUR DIOXIDE ($SO_2$) ALLOWANCES, NITROGEN OXIDE ($NO_x$) ALLOWANCES, AND $NO_x$ OZONE SEASON ALLOWANCES FOR THE AFFECTED UNITS:**

| Program | Allocation of Allowances |
|---|---|
| CAIR $SO_2$ Allowances | These units are not entitled to an allocation of CAIR $SO_2$ allowances pursuant to 40 CFR Part 96. |
| CAIR $NO_x$ Annual Allowances | These units are eligible to an allocation of CAIR NOx Annual Allowances pursuant to 35 IAC 225.430, 225.435 and 225.440. |
| CAIR $NO_x$ Ozone Season Allowances | These units are eligible to an allocation of CAIR NOx Ozone Season Allowances pursuant to 35 IAC 225.530, 225.535 and 225.540. |

**PERMIT APPLICATION:** The permit application, which includes CAIR $SO_2$ Trading Program requirements, CAIR $NO_x$ Annual Trading Program requirements, CAIR $NO_x$ Ozone Season Trading Program requirements, and other standard requirements, is attached and incorporated as part of this permit. The owners and operators, and designated representative of this source must comply with the standard requirements and special provisions set forth in the application.

**COMMENTS, NOTES AND JUSTIFICATIONS:** This permit contains provisions related to $SO_2$ emissions and $NO_x$ emissions and requires the owners and operators to hold CAIR $SO_2$ allowances to account for $SO_2$ emissions, CAIR $NO_x$ annual allowances to account for annual $NO_x$ emissions, and CAIR $NO_x$ ozone season allowances to account for ozone season $NO_x$ emissions from the CAIR units. An

allowance is a limited authorization to emit $SO_2$ or $NO_x$ emissions during or after a specified control period. The transfer of allowances to and from the applicable compliance or general account does not necessitate a revision to this permit.

As related to seasonal emissions of $NO_x$, CAIR $NO_x$ Ozone Season Trading Program supersedes the $NO_x$ Trading Budget, beginning on the effective date of this permit. Accordingly, effective January 1, 2009, the provisions of this permit effectively supersede Section 6.1 of the CAAPP permit, which relate to compliance with $NO_x$ Trading Program for Electric Generating Units (EGU).

This CAIR permit does not affect the source's responsibility to meet all other applicable local, state and federal requirements.

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

Edwin C. Bakowski, P.E. Date Issued: _____
Manager, Permit Section
Division of Air Pollution Control

ECB:KKD:

cc: Beth Valenziano, USEPA Region V
FOS – Region 1, Illinois EPA

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL -- PERMIT SECTION
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

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|---|
| Revision #: _____ |
| Date: ____ / ____ / ____ |
| Page ____ of ____ |

# Application For CAIR Permit For Electrical Generating Units (EGU)

| FOR AGENCY USE ONLY |
|---|
| ID NUMBER: |
| PERMIT No.: |
| DATE: |

This application form is to be used to request the Clean Air Act Interstate Rule (CAIR) permit required by the CAIR $SO_2$ trading program, CAIR NOx annual trading program, CAIR NOx ozone season trading program for EGU subject to the provisions of 35 IAC Part 225, Subpart C, D, and E, respectively.

## SECTION 1: SOURCE AND EGU INFORMATION

| | | |
|---|---|---|
| 1) COMPANY NAME: Calumet Energy Team, LLC | | |
| 2) PLANT OR FACILITY NAME: Calumet Energy Team Project | | |
| 3) SOURCE ID NO.: 031600GHA | 4) ORIS FACILITY CODE: 55296 | |
| 5) CONTACT NAME: Ms. Chris Jacobsen | 6) PHONE NO.: 402-691-9598 | 7) E-MAIL ADDRESS: cjacobsen@tenaska.com |

8) ELECTRICAL GENERATING UNITS:

| GENERATING UNIT / EGU DESIGNATION | EGU DESCRIPTION | APPLICABILITY (Mark all applicable boxes) | |
|---|---|---|---|
| Calumet Energy Team/CT-01 | Combustion Turbine | ☒ Existing EGU<br>☐ New EGU | ☒ CAIR $SO_2$ trading program<br>☒ CAIR NOx annual trading program<br>☒ CAIR NOx ozone season trading program |
| Calumet Energy Team/CT-02 | Combustion Turbine | ☒ Existing EGU<br>☐ New EGU | ☒ CAIR $SO_2$ trading program<br>☒ CAIR NOx annual trading program<br>☒ CAIR NOx ozone season trading program |
| | | ☐ Existing EGU<br>☐ New EGU | ☐ CAIR $SO_2$ trading program<br>☐ CAIR NOx annual trading program<br>☐ CAIR NOx ozone season trading program |
| | | ☐ Existing EGU<br>☐ New EGU | ☐ CAIR $SO_2$ trading program<br>☐ CAIR NOx annual trading program<br>☐ CAIR NOx ozone season trading program |
| | | ☐ Existing EGU<br>☐ New EGU | ☐ CAIR $SO_2$ trading program<br>☐ CAIR NOx annual trading program<br>☐ CAIR NOx ozone season trading program |
| | | ☐ Existing EGU<br>☐ New EGU | ☐ CAIR $SO_2$ trading program<br>☐ CAIR NOx annual trading program<br>☐ CAIR NOx ozone season trading program |
| | | ☐ Existing EGU<br>☐ New EGU | ☐ CAIR $SO_2$ trading program<br>☐ CAIR NOx annual trading program<br>☐ CAIR NOx ozone season trading program |
| | | ☐ Existing EGU<br>☐ New EGU | ☐ CAIR $SO_2$ trading program<br>☐ CAIR NOx annual trading program<br>☐ CAIR NOx ozone season trading program |
| | | ☐ Existing EGU<br>☐ New EGU | ☐ CAIR $SO_2$ trading program<br>☐ CAIR NOx annual trading program<br>☐ CAIR NOx ozone season trading program |

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The Illinois EPA is authorized to require, and you must disclose, the requested information on this form pursuant to Section 39.5 of the Environmental Protection Act ("Act") 415 ILCS 5/39.5. This information shall be provided using either this form or in an alternative manner at your discretion. Failure to disclose the information may result in your application being denied and/or penalties as provided for in the Act, 415 ILCS 5/42-45. This form has been approved by the Forms Management Center.

**APPLICATION PAGE** 1

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| 9) DETERMINATION OF $SO_2$ EMISSIONS: | | |
|---|---|---|
| List each EGU that is not currently equipped with a "Part 75 Approved" continuous emissions monitoring system (CEMS) for $SO_2$ | | |
| (a) EGUs for which $SO_2$ CEMS installed but not certified: | | |
| 1. | 4. | 7. |
| 2. | 5. | 8. |
| 3. | 6. | 9. |
| (b) ) EGUs for which $SO_2$ CEMS yet to be installed: | | |
| 1. | 4. | 7. |
| 2. | 5. | 8. |
| 3. | 6. | 9. |
| (c) ) EGUs for which $SO_2$ emissions to be determined by the alternative protocol for peaker units. | | |
| 1. | 4. | 7. |
| 2. | 5. | 8. |
| 3. | 6. | 9. |

| 10) DETERMINATION OF $NO_x$ EMISSIONS: | | |
|---|---|---|
| List each EGU that is not currently equipped with a "Part 75 Approved" continuous emissions monitoring system (CEMS) for $NO_x$ | | |
| (a) EGUs for which $NO_x$ CEMS installed but not certified: | | |
| 1. | 4. | 7. |
| 2. | 5. | 8. |
| 3. | 6. | 9. |
| (b) LGUs for which $NO_x$ CEMS yet to be installed: | | |
| 1. | 4. | 7. |
| 2. | 5. | 8. |
| 3. | 6. | 9. |
| (c) EGUs for which $NO_x$ emissions to be determined by the alternative protocol for peaker units | | |
| 1. | 4. | 7. |
| 2. | 5. | 8. |
| 3. | 6. | 9. |

11) CERTIFICATION:

(a) Has a complete Certificate of Representation for the designated representatives for the source been submitted to USEPA, with a copy provided to the Illinois EPA? ☒ Yes ☐ No

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

NAME (Designated Representative) Greg Kunkel

SIGNATURE (Designated Representative): DATE: 10/25/2007

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## SECTION 2: CAIR $SO_2$ TRADING PROGRAM
## COMPLIANCE REQUIREMENTS AS SET FORTH IN 35 IAC 225.310

(a) APPLICABLE REGULATIONS:

The requirements of 35 IAC Part 225, Subpart C and 40 CFR 96, subpart AAA (excluding 40 CFR 96.204, and 96.206), subpart BBB, subpart FFF, subpart GGG and subpart HHH as incorporated by reference in 35 IAC 225.140.

(b) CAIR PERMIT REQUIREMENTS:

1) The owner or operator of each source with one or more CAIR $SO_2$ units at the source subject to 35 IAC Part 225, Subpart C must apply for a permit issued by the Agency with federally enforceable conditions covering the CAIR $SO_2$ Trading Program ("CAIR permit") that complies with the requirements of 35 IAC 225.320.

2) The owner or operator of each CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source subject to 35 IAC Part 225, Subpart C must operate the CAIR $SO_2$ unit in compliance with such CAIR permit.

(c) MONITORING REQUIREMENTS:

1) The owner or operator of each CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source must comply with the monitoring, reporting and recordkeeping requirements of 40 CFR 96, Subpart HHH. The CAIR designated representative of each CAIR $SO_2$ source and each CAIR $SO_2$ unit at the CAIR $SO_2$ source must comply with those sections of the monitoring, reporting and recordkeeping requirements of 40 CFR 96, Subpart HHH, applicable to the CAIR designated representative.

2) The compliance of each CAIR $SO_2$ source with the emissions limitation pursuant to 35 IAC 225.310(d) will be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HHH and 40 CFR 75.

(d) EMISSION REQUIREMENTS:

1) By the allowance transfer deadline, midnight of March 1, 2011, and by midnight of March 1 of each subsequent year if March 1 is a business day, the owner or operator of each CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source must hold a tonnage equivalent in CAIR $SO_2$ allowances available for compliance deductions pursuant to 40 CFR 96.254(a) and (b) in the CAIR $SO_2$ source's CAIR $SO_2$ compliance account. If March 1 is not a business day, the allowance transfer deadline means by midnight of the first business day thereafter. The number of allowances held on the allowance transfer deadline may not be less than the total tonnage equivalent of the rate of $SO_2$ emissions for the control period from all CAIR $SO_2$ units at the CAIR $SO_2$ source, as determined in accordance with 40 CFR 96, subpart HHH.

2) Each ton of excess emissions of $SO_2$ emitted by a CAIR $SO_2$ source for each day of control period, starting in 2010, will constitute a separate violation of 35 IAC Part 225, Subpart C, the Clean Air Act, and the Act.

3) Each CAIR $SO_2$ unit will be subject to the requirements of 35 IAC 225.310(d)(1) for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitoring certification requirements pursuant to 40 CFR 96.270(a)(1) or (2) and for each control period thereafter.

4) CAIR $SO_2$ allowances must be held in, deducted from, or transferred into or among allowance accounts in accordance with 35 IAC Part 225, Subpart C, and 40 CFR 96, subparts FFF and GGG.

5) In order to comply with the requirements of 35 IAC 225.310(d)(1), a CAIR $SO_2$ allowance may not be deducted for compliance according to 35 IAC 225.310(d)(1) for a control period in a calendar year before the year for which the allowance is allocated.

6) A CAIR $SO_2$ allowance is a limited authorization to emit $SO_2$ in accordance with the CAIR $SO_2$ Trading Program. No provision of the CAIR $SO_2$ Trading Program, the CAIR permit application, the CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.205, and no provision of law, will be construed to limit the authority of the United States or the State to terminate or limit this authorization.

7) A CAIR $SO_2$ allowance does not constitute a property right.

8) Upon recordation by USEPA pursuant to 40 CFR 96, subpart FFF or subpart GGG, every allocation, transfer, or deduction of a CAIR $SO_2$ allowance to or from a CAIR $SO_2$ source's compliance account is deemed to amend automatically, and become a part of, any CAIR permit of the CAIR $SO_2$ source. This automatic amendment of the CAIR permit will be deemed an operation of law and will not require any further review.

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d) RECORDKEEPING AND REPORTING REQUIREMENTS

1) Unless otherwise provided, the owner or operator of the CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source must keep on site at the source each of the documents listed in subsections (d)(1)(A) through (d)(1)(D) of 35 IAC 225.390 for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years in writing by the Agency or USEPA.

A) The certificate of representation for the CAIR designated representative for the source and each CAIR $SO_2$ unit at the source, all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents must be retained on site at the source beyond such five-year period until the documents are superseded because of the submission of a new certificate of representation, pursuant to 40 CFR 96.213, changing the CAIR designated representative.

B) All emissions monitoring information, in accordance with 40 CFR 96, subpart HHH.

C) Copies of all reports, compliance certifications, and other submissions and all records made or required pursuant to the CAIR $SO_2$ Trading Program or documents necessary to demonstrate compliance with the requirements of the CAIR $SO_2$ Trading Program or with the requirements of 35 IAC Part 225, Subpart C.

D) Copies of all documents used to complete a CAIR permit application and any other submission or documents used to demonstrate compliance pursuant to the CAIR $SO_2$ Trading Program.

2) The CAIR designated representative of a CAIR $SO_2$ source and each CAIR $SO_2$ unit at the source must submit to the Agency and USEPA the reports and compliance certifications required pursuant to the CAIR $SO_2$ Trading Program, including those pursuant to 40 CFR 96, subpart HHH.

f) LIABILITY

1) No revision of a permit for a CAIR $SO_2$ unit may excuse any violation of the requirements of 35 IAC Part 225, Subpart C or the requirements of the CAIR $SO_2$ Trading Program.

2) Each CAIR $SO_2$ source and each CAIR $SO_2$ unit must meet the requirements of the CAIR $SO_2$ Trading Program.

3) Any provision of the CAIR $SO_2$ Trading Program that applies to a CAIR $SO_2$ source (including any provision applicable to the CAIR designated representative of a CAIR $SO_2$ source) will also apply to the owner and operator of the CAIR $SO_2$ source and to the owner and operator of each CAIR $SO_2$ unit at the source.

4) Any provision of the CAIR $SO_2$ Trading Program that applies to a CAIR $SO_2$ unit (including any provision applicable to the CAIR designated representative of a CAIR $SO_2$ unit) will also apply to the owner and operator of the CAIR $SO_2$ unit.

5) The CAIR designated representative of a CAIR $SO_2$ unit that has excess $SO_2$ emissions in any control period must surrender the allowances as required for deduction pursuant to 40 CFR 96.254(d)(1).

6) The owner or operator of a CAIR $SO_2$ unit that has excess $SO_2$ emissions in any control period must pay any fine, penalty, or assessment or comply with any other remedy imposed pursuant to the Act and 40 CFR 96.254(d)(2).

g) EFFECT ON OTHER AUTHORITIES

No provision of the CAIR $SO_2$ Trading Program, a CAIR permit application, a CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.205 will be construed as exempting or excluding the owner and operator and, to the extent applicable, the CAIR designated representative of a CAIR $SO_2$ source or a CAIR $SO_2$ unit from compliance with any other regulation promulgated pursuant to the CAA, the Act, any State regulation or permit, or a federally enforceable permit.

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## SECTION 3: CAIR $NO_x$ ANNUAL TRADING PROGRAM COMPLIANCE REQUIREMENTS AS SET FORTH IN 35 IAC 225.410

(a) APPLICABLE REGULATIONS

The requirements of 35 IAC Part 225, Subpart D and 40 CFR 96, subpart AA (excluding 40 CFR 96.104, 96.105(b)(2), and 96.106), subpart BB, subpart FF, subpart GG and subpart HH as incorporated by reference in 35 IAC 225.140.

(b) CAIR PERMIT REQUIREMENTS

1) The designated representative of each source with one or more CAIR $NO_x$ units at the source subject to 35 IAC Part 225, Subpart D must apply for a permit issued by the Agency with federally enforceable conditions covering the CAIR $NO_x$ Annual Trading Program ("CAIR permit") that complies with the requirements of 35 IAC 225.420.

2) The owner or operator of each CAIR $NO_x$ source and each CAIR $NO_x$ unit at the source must operate the CAIR $NO_x$ unit in compliance with its CAIR permit.

(c) MONITORING REQUIREMENTS

1) The owner or operator of each CAIR $NO_x$ source and each CAIR $NO_x$ unit at the source must comply with the monitoring, reporting and recordkeeping requirements of 40 CFR 96, Subpart HH and 35 IAC 225.450. The CAIR designated representative of each CAIR $NO_x$ source and each CAIR $NO_x$ unit at the CAIR $NO_x$ source must comply with those sections of the monitoring, reporting and recordkeeping requirements of 40 CFR 96, Subpart HH, applicable to a CAIR designated representative.

2) The compliance of each CAIR $NO_x$ source with the emissions limitation pursuant to 35 IAC 225.410(d) will be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HH.

(d) EMISSION REQUIREMENTS

1) By the allowance transfer deadline, midnight of March 1, 2010, and by midnight of March 1 of each subsequent year if March 1 is a business day, the owner or operator of each CAIR $NO_x$ source and each CAIR $NO_x$ unit at the source must hold CAIR $NO_x$ allowances available for compliance deductions pursuant to 40 CFR 96.154(a) in the CAIR $NO_x$ source's CAIR $NO_x$ compliance account. If March 1 is not a business day, the allowance transfer deadline means by midnight of the first business day thereafter. The number of allowances held on the allowance transfer deadline may not be less than the tons of $NO_x$ emissions for the control period from all CAIR $NO_x$ units at the source, as determined in accordance with 40 CFR 96, subpart HH.

2) Each ton of excess emissions of a CAIR $NO_x$ source for each day in a control period, starting in 2009 will constitute a separate violation of 35 IAC Part 225, Subpart D, the Act, and the CAA.

3) Each CAIR $NO_x$ unit will be subject to the requirements 35 IAC 225.410(a)(1) for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitoring certification requirements pursuant to 40 CFR 96.170(b)(1) or (b)(2) and for each control period thereafter.

4) CAIR $NO_x$ allowances must be held in, deducted from, or transferred into or among allowance accounts in accordance with 35 IAC Part 225, Subpart D, and 40 CFR 96, subparts FF and GG.

5) In order to comply with the requirements of 35 IAC 225.410(d)(1), a CAIR $NO_x$ allowance may not be deducted for compliance according to 35 IAC 225.410(d)(1) for a control period in a year before the calendar year for which the allowance is allocated.

6) A CAIR $NO_x$ allowance is a limited authorization to emit one ton of $NO_x$ in accordance with the CAIR $NO_x$ Trading Program. No provision of the CAIR $NO_x$ Trading Program, the CAIR $NO_x$ permit application, the CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.105, and no provision of law, will be construed to limit the authority of the United States or the State to terminate or limit this authorization.

7) A CAIR $NO_x$ allowance does not constitute a property right.

8) Upon recordation by USEPA pursuant to 40 CFR 96, subpart FF or subpart GG, every allocation, transfer, or deduction of a CAIR $NO_x$ allowance to or from a CAIR $NO_x$ source's compliance account is deemed to amend automatically, and become a part of, any CAIR $NO_x$ permit of the CAIR $NO_x$ source. This automatic amendment of the CAIR permit will be deemed an operation of law and will not require any further review.

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e) RECORDKEEPING AND REPORTING REQUIREMENTS:

1) Unless otherwise provided, the owner or operator of the CAIR $NO_x$ source and each CAIR $NO_x$ unit at the source must keep on site at the source each of the documents listed in subsections (e)(1)(A) through (e)(1)(E) of 35 IAC 225.410 for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years in writing by the Agency or USEPA.

A) The certificate of representation for the CAIR designated representative for the source and each CAIR $NO_x$ unit at the source, all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents must be retained on site at the source beyond such five-year period until the documents are superseded because of the submission of a new certificate of representation pursuant to 40 CFR 96.113, changing the CAIR designated representative.

B) All emissions monitoring information, in accordance with 40 CFR 96, subpart HH.

C) Copies of all reports, compliance certifications, and other submissions and all records made or required pursuant to the CAIR $NO_x$ Annual Trading Program or documents necessary to demonstrate compliance with the requirements of the CAIR $NO_x$ Annual Trading Program or with the requirements of 35 IAC Part 225, Subpart D.

D) Copies of all documents used to complete a CAIR $NO_x$ permit application and any other submission or documents used to demonstrate compliance pursuant to the CAIR $NO_x$ Annual Trading Program.

E) Copies of all records and logs for gross electrical output and useful thermal energy required by 35 IAC 225.450.

2) The CAIR designated representative of a CAIR $NO_x$ source and each CAIR $NO_x$ unit at the source shall submit to the Agency and USEPA the reports and compliance certifications required pursuant to the CAIR $NO_x$ Annual Trading Program, including those pursuant to 40 CFR 96, subpart HH.

f) LIABILITY:

1) No revision of a permit for a CAIR $NO_x$ unit may excuse any violation of the requirements of 35 IAC Part 225, Subpart D or the requirements of the CAIR $NO_x$ Annual Trading Program.

2) Each CAIR $NO_x$ source and each CAIR $NO_x$ unit must meet the requirements of the CAIR $NO_x$ Annual Trading Program.

3) Any provision of the CAIR $NO_x$ Annual Trading Program that applies to a CAIR $NO_x$ source (including any provision applicable to the CAIR designated representative of a CAIR $NO_x$ source) will also apply to the owner and operator of the CAIR $NO_x$ source and to the owner and operator of each CAIR $NO_x$ unit at the source.

4) Any provision of the CAIR $NO_x$ Annual Trading Program that applies to a CAIR $NO_x$ unit (including any provision applicable to the CAIR designated representative of a CAIR $NO_x$ unit) will also apply to the owner and operator of the CAIR $NO_x$ unit.

5) The CAIR designated representative of a CAIR $NO_x$ unit that has excess $NO_x$ emissions in any control period must surrender the allowances as required for deduction pursuant to 40 CFR 96.154(d)(1).

6) The owner or operator of a CAIR $NO_x$ unit that has excess $NO_x$ emissions in any control period must pay any fine, penalty, or assessment or comply with any other remedy imposed pursuant to the Act and 40 CFR 96.154(d)(2).

g) EFFECT ON OTHER AUTHORITIES:

No provision of the CAIR $NO_x$ Annual Trading Program, a CAIR permit application, a CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.105 will be construed as exempting or excluding the owner and operator and, to the extent applicable, the CAIR designated representative of a CAIR $NO_x$ source or a CAIR $NO_x$ unit from compliance with any other regulation promulgated pursuant to the CAA, the Act, any State regulation or permit, or a federally enforceable permit.

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**SECTION 4: CAIR $NO_x$ OZONE SEASON TRADING PROGRAM**
**COMPLIANCE REQUIREMENTS AS SET FORTH IN 35 IAC 225.510**

(a) APPLICABLE REGULATIONS

The requirements of 35 IAC Part 225, Subpart E and 40 CFR 96, subpart AAAA (excluding 40 CFR 96.304, 96.306(b)(2), and 96.306), subpart BBBB, subpart FFFF, subpart GGGG and subpart HHHH as incorporated by reference in 35 IAC 225.140

(b) CAIR PERMIT REQUIREMENTS

1) The designated representative of each source with one or more CAIR $NO_x$ Ozone Season units at the source subject to 35 IAC Part 225, Subpart E must apply for a permit issued by the Agency with federally enforceable conditions covering the CAIR $NO_x$ Ozone Season Trading Program ("CAIR permit") that complies with the requirements of 35 IAC 225.529

2) The owner or operator of each CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must operate the CAIR $NO_x$ Ozone Season unit in compliance with its CAIR permit.

(c) MONITORING REQUIREMENTS

1) The owner or operator of each CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must comply with the monitoring, reporting and recordkeeping requirements of 40 CFR 96, Subpart HHHH, 40 CFR 75 and 35 IAC 225.555. The CAIR designated representative of each CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must comply with those sections of the monitoring, reporting and recordkeeping requirements of 40 CFR 96, Subpart HHHH, applicable to a CAIR designated representative.

2) The compliance of each CAIR $NO_x$ Ozone Season source with the CAIR $NO_x$ Ozone Season emissions limitation pursuant to 35 IAC 225.510(d) will be determined by the emissions measurements recorded and reported in accordance with 40 CFR 96, subpart HHHH.

(d) EMISSION REQUIREMENTS

1) By the allowance transfer deadline, midnight of November 30, 2009, and by midnight of November 30 of each subsequent year if November 30 is a business day, the owner or operator of each CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must hold CAIR $NO_x$ allowances available for compliance deductions pursuant to 40 CFR 96.354(a) in the CAIR $NO_x$ Ozone Season source's compliance account. If November 30 is not a business day, the allowance transfer deadline means by midnight of the first business day thereafter. The number of allowances held may not be less than the tons of $NO_x$ emissions for the control period from all CAIR $NO_x$ Ozone Season units at the CAIR $NO_x$ Ozone Season source, as determined in accordance with 40 CFR 96, subpart HHHH.

2) Each ton of excess emissions of a CAIR $NO_x$ Ozone Season source for each day in a control period, starting in 2009 will constitute a separate violation of 35 IAC Part 225, Subpart E, the Act, and the CAA.

3) Each CAIR $NO_x$ Ozone Season unit will be subject to the requirements 35 IAC 225.510(d)(1) for the control period starting on the later of May 1, 2009 or the deadline for meeting the unit's monitoring certification requirements pursuant to 40 CFR 96.370(b)(1), (b)(2) or (b)(3) and for each control period thereafter.

4) CAIR $NO_x$ Ozone Season allowances must be held in, deducted from, or transferred into or among allowance accounts in accordance with 35 IAC Part 225, Subpart E, and 40 CFR 96, subparts FFFF and GGGG.

5) In order to comply with the requirements of 35 IAC 225.510(d)(1), a CAIR $NO_x$ Ozone Season allowance may not be deducted for compliance according to 35 IAC 225.510(d)(1) for a control period in a calendar year before the year for which the CAIR $NO_x$ Ozone Season allowance is allocated.

6) A CAIR $NO_x$ Ozone Season allowance is a limited authorization to emit one ton of $NO_x$ in accordance with the CAIR $NO_x$ Ozone Season Trading Program. No provision of the CAIR $NO_x$ Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.305, and no provision of law, will be construed to limit the authority of the United States or the State to terminate or limit this authorization.

7) A CAIR $NO_x$ Ozone Season allowance does not constitute a property right.

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**FOR APPLICANT'S USE**

B) Upon recordation by USEPA pursuant to 40 CFR 96, subpart FFFF or GGGG, every allocation, transfer, or deduction of a CAIR $NO_x$ Ozone Season allowance to or from a CAIR $NO_x$ Ozone Season source compliance account is deemed to amend automatically, and become a part of, any CAIR permit of the CAIR $NO_x$ Ozone Season source. This automatic amendment of the CAIR permit will be deemed an operation of law and will not require any further review.

4) RECORDKEEPING AND REPORTING REQUIREMENTS

1) Unless otherwise provided, the owner or operator of the CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must keep on site at the source each of the documents listed in subsections (e)(1)(A) through (e)(1)(G) of 35 IAC 225.510 for a period of five years from the date the document is created. This period may be extended, for cause, at any time prior to the end of five years, in writing by the Agency or USEPA.

A) The certificate of representation for the CAIR designated representative for the source and each CAIR $NO_x$ Ozone Season unit at the source, all documents that demonstrate the truth of the statements in the certificate of representation, provided that the certificate and documents must be retained on site at the source beyond such five-year period until the documents are superseded because of the submission of a new certificate of representation, pursuant to 40 CFR 96.313, changing the CAIR designated representative.

B) All emissions monitoring information, in accordance with 40 CFR 96, subpart HHHH.

C) Copies of all reports, compliance certifications, and other submissions and all records made or required pursuant to the CAIR $NO_x$ Ozone Season Trading Program or documents necessary to demonstrate compliance with the requirements of the CAIR $NO_x$ Ozone Season Trading Program or with the requirements of 35 IAC Part 225, Subpart E.

D) Copies of all documents used to complete a CAIR permit application and any other submission or documents used to demonstrate compliance pursuant to the CAIR $NO_x$ Ozone Season Trading Program.

E) Copies of all records and logs for gross electrical output and useful thermal energy required by 35 IAC 225.550.

2) The CAIR designated representative of a CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit at the source must submit to the Agency and USEPA the reports and compliance certifications required pursuant to the CAIR $NO_x$ Ozone Season Trading Program, including those pursuant to 40 CFR 96, subpart HHHH and 35 IAC 225.550.

5) LIABILITY

1) No revision of a permit for a CAIR $NO_x$ Ozone Season unit may excuse any violation of the requirements of 35 IAC Part 225, Subpart E or the requirements of the CAIR $NO_x$ Ozone Season Trading Program.

2) Each CAIR $NO_x$ Ozone Season source and each CAIR $NO_x$ Ozone Season unit must meet the requirements of the CAIR $NO_x$ Ozone Season Trading Program.

3) Any provision of the CAIR $NO_x$ Ozone Season Trading Program that applies to a CAIR $NO_x$ Ozone Season source (including any provision applicable to the CAIR designated representative of a CAIR $NO_x$ Ozone Season source) will also apply to the owner and operator of the CAIR $NO_x$ Ozone Season source and to the owner and operator of each CAIR $NO_x$ Ozone Season unit at the source.

4) Any provision of the CAIR $NO_x$ Ozone Season Trading Program that applies to a CAIR $NO_x$ Ozone Season unit (including any provision applicable to the CAIR designated representative of a CAIR $NO_x$ Ozone Season unit) will also apply to the owner and operator of the CAIR $NO_x$ Ozone Season unit.

5) The CAIR designated representative of a CAIR $NO_x$ Ozone Season unit that has excess emissions in any control period must surrender the allowances as required for deduction pursuant to 40 CFR 96.354(d)(1).

6) The owner or operator of a CAIR $NO_x$ Ozone Season unit that has excess $NO_x$ emissions in any control period must pay any fine, penalty, or assessment or comply with any other remedy imposed pursuant to the Act and 40 CFR 96.354(d)(3).

6) EFFECT ON OTHER AUTHORITIES

No provision of the CAIR $NO_x$ Ozone Season Trading Program, a CAIR permit application, a CAIR permit, or a retired unit exemption pursuant to 40 CFR 96.305 will be construed as exempting or excluding the owner and operator and, to the extent applicable, the CAIR designated representative of a CAIR $NO_x$ Ozone Season source or a CAIR $NO_x$ Ozone Season unit from compliance with any other regulation promulgated pursuant to the CAA, the Act, any State regulation or permit, or a federally enforceable permit.

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Attachment 6 Acid Rain Permit

**ACID RAIN PROGRAM**
**PERMIT**

217-782-2113

Calumet Energy Team Project
Attn: Greg Kunkel, Designated Representative
11653 South Torrence Avenue
Chicago, Illinois 60617-5601

Oris No.: 55296
IEPA I.D. No.: 301600GHA
Source/Unit: Calumet Energy Team Project, CT01-CT02
Date Received: December 3, 2007
Date Issued: **Error! Bookmark not defined.**
Effective Date: January 1, 2009
Expiration Date: December 31, 2013

**STATEMENT OF BASIS:**

In accordance with Section 39.5(17)(b) of Illinois Environmental Protection Act and Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program permit to Calumet Energy Team Project for Calumet facility.

**SULFUR DIOXIDE ($SO_2$) ALLOCATIONS AND NITROGEN OXIDE ($NO_x$) REQUIREMENTS FOR EACH AFFECTED UNIT:**

| | | |
|---|---|---|
| CT01-CT02 | $SO_2$ Allowances | These units are not entitled to an allocation of $SO_2$ allowances pursuant to 40 CFR Part 73. |
| | $NO_x$ limit | These units are not subject to a $NO_x$ emissions limitation pursuant to 40 CFR Part 76. |

**PERMIT APPLICATION:** The permit application, which includes $SO_2$ allowance requirements and other standard requirements, is attached and incorporated as part of this permit. The owners and operators of this source must comply with the standard requirements and special provisions set forth in the application

**COMMENTS, NOTES AND JUSTIFICATIONS:** This permit contains provisions related to $SO_2$ emissions and requires the owners and operators to hold $SO_2$ allowances to account for $SO_2$ emissions from the affected units. An allowance is a limited authorization to emit up to one ton of $SO_2$ during or after a specified calendar year. Although this plant is not eligible for an allowance allocated by USEPA, the owners or operators may obtain $SO_2$ allowances to cover emissions from other sources under a marketable allowance program. The transfer of allowances to and from a unit account does not necessitate a revision to the unit $SO_2$ allocations denoted in this permit (See 40 CFR 72.84).

This permit contains provisions related to $NO_x$ emissions and requires the owners and operators to monitor $NO_x$ emissions from affected units in accordance with applicable provisions of 40 CFR Part 75. These units are not subject to a $NO_x$ emission limitation because USEPA has not adopted such limitation for combined cycle turbines.

This Acid Rain Program permit does not authorize the construction and operation of the affected units as such matters are addressed by Titles I and V of the Clean Air Act. This permit also does not affect the source's responsibility to meet all other applicable local, state and federal requirements, including 35 IAC Part 225, Subparts C, D, and E.

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

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

DES:KKD:

cc: Beth Valenziano, USEPA Region V
Illinois EPA Region 1

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

# Acid Rain Permit Application

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

| Plant Name | State | ORIS Code |
|---|---|---|
| Calumet Energy Team | IL | 55296 |

**STEP 1**

**Identify the source by plant name, State, and ORIS code.**

This submission is: ☐ New X Revised (Renewal Application)

**STEP 2**

**Enter the unit ID# for every affected unit at the affected source in column "a." For new units, enter the requested information in columns "c" and "d."**

| a | b | c | d |
|---|---|---|---|
| Unit ID# | Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1) | New Units Commence Operation Date | New Units Monitor Certification Deadline |
| **1 | Yes | N/A | N/A |
| **2 | Yes | N/A | N/A |
| | Yes | | |
| | Yes | | |
| | Yes | | |
| | Yes | | |
| | Yes | | |
| | Yes | | |
| | Yes | | |
| | Yes | | |
| | Yes | | |
| | Yes | | |
| | Yes | | |
| | Yes | | |
| | Yes | | |
| | Yes | | |

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**STEP 3**

**Read the standard requirements**

## Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

## Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

## Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

STEP 3, Cont'd.

**Nitrogen Oxides Requirements** The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

**Excess Emissions Requirements**

(1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

**Recordkeeping and Reporting Requirements**

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

**Liability**

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

**Step 3, Cont'd.**

## Liability, Cont'd.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 ($NO_x$ averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

## Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided,* that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

**STEP 4**

**Read the certification statement, sign, and date**

## Certification

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

| | |
|---|---|
| Name **Larry G. Carlson, Alternate Designated Representative** | |
| Signature [signature] | Date 4/16/08 |

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