

217/782-2113

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

PERMITTEE

University of Illinois at Chicago  
Attn: Ann T. Nguyen, Energy Manager  
1140 South Morgan Street  
Chicago, Illinois 60607

Application No.: 96080077

I.D. No.: 031600CRS

Applicant's Designation:

Date Received: August 21, 1996

Operation of: University Campus

Date Issued: June 20, 2002

Expiration Date<sup>2</sup>: June 19, 2007

Source Location: 1140 South Morgan Street, Chicago, Cook County

Responsible Official: Ann T. Nguyen, Energy Manager of Operations and Maintenance

This permit is hereby granted to the above-designated Permittee to OPERATE a University Campus (West), pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: June 27, 2002

Revision Date Issued: November 25, 2002

Purpose of Revision: Administrative Amendment

This administrative amendment reflects revisions to this permit due to typographical errors. Because the changes in the permit were only administrative, no formal public notice was issued.

This document only contains those portions of the entire CAAPP permit that have been revised as a result of this administrative amendment. If a conflict exists between this document and previous versions of the CAAPP permit, this document supersedes those terms and conditions of the permit for which the conflict exists. The previous permit issued on June 20, 2002 is incorporated herein by reference.

Please attach a copy of this amendment and the following revised pages to the front of the most recently issued entire permit.

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

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

DES:AB:psj

cc: Illinois EPA, FOS, Region 1

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

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

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1.0 SOURCE IDENTIFICATION

1.1 Source

University of Illinois at Chicago  
1140 South Morgan Street  
Chicago, Illinois 60607  
312/996-7159

I.D. No.: 031600CRS  
Standard Industrial Classification: 8221, Educational Facility

1.2 Owner/Parent Company

Board of Trustees of the University of Illinois  
Administration Building  
Urbana, Illinois 61801

1.3 Operator

University of Illinois at Chicago  
1140 South Morgan Street  
Chicago, Illinois 60607

Joseph Motyka, Chief Plant Operating Engineer  
312/996-7159

1.4 General Source Description

The University of Illinois at Chicago (West Campus) is located at 1140 South Morgan Street (main address) in Chicago and operates power plant and incinerators formerly designated under the following ID's: 031600CRS, 031600DOB, and 031600DOC. West and East Campuses (respectively, 031600CRS and 031600CEV) are considered a single source for the purposes of the Title V Program, 40 CFR 52.21 and 35 IAC Part 203. The University of Illinois at Chicago decides to keep two separate CAAPP permits for West and East Campuses and comply with the rules mentioned above.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ASTM	American Society for Testing and Materials
ATU	Allotment Trading Unit
BAT	Best Available Technology
Btu	British thermal unit
°C	Degrees Celsius
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
Cd	Cadmium
CEMS	Continuous Emission Monitoring System
cfm	Cubic foot per minute
CFR	Code of Federal Regulations
CO	Carbon Monoxide
dscf	Dry standard cubic foot
dscm	Dry standard cubic meter
ERMS	Emission Reduction Market System
°F	Degrees Fahrenheit
ft	Feet
ft <sup>3</sup>	Cubic Feet
G	Grams
gal	Gallons
gr	Grains
HAP	Hazardous Air Pollutant
HCl	Hydrogen Chloride
Hg	Mercury
HMIWI	Hospital/Medical/Infectious Waste Incinerator
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
°K	Degrees Kelvin
kg	Kilogram
kW	kilowatts
l	liter
LAER	Lowest Achievable Emission Rate
lb	pound
MACT	Maximum Achievable Control Technology
mg	milligram
mmBtu	Million British thermal units
mmscf	Million standard cubic feet
mo	month
MW	Megawatts

NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
Pb	Lead
NSPS	New Source Performance Standards
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
scf	Standard cubic feet
scm	Standard cubic meters
SO <sub>2</sub>	Sulfur Dioxide
T	Ton
TEQ	Toxic equivalency
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
wt. %	Weight percent
yr	year

### 3.0 INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

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

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

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:

- a. Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].
- b. Furnaces used for melting metals, other than beryllium, with a brim full capacity of less than 450 cubic inches by volume [35 IAC 201.210(a)(6)].
- c. 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)].
- d. 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)].

- e. Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].
- f. Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units [35 IAC 201.210(a)(16)].
- g. Storage tanks of any size containing exclusively soaps, detergents, surfactants, glycerin, waxes, vegetable oils, greases, animal fats, sweeteners, corn syrup, aqueous salt solutions, or aqueous caustic solutions, provided an organic solvent has not been mixed with such materials [35 IAC 201.210(a)(17)].

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

### 3.2 Compliance with Applicable Requirements

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

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

### 3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1,

until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

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

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

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Unit 1	Boilers	1950; 1958; 1971; 1975	None
Unit 2	Engines/Generators (3 Units)	2002 (Currently Under Construction)	Catalytic Converter Per Each Unit
Unit 3	Turbines (3 Units with 3 Duct Burners)	2002 (Currently Under Construction)	None
Unit 4	Pathological and General Waste Incinerators (3 Units)	1978; 1989; 1996	None

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of NO<sub>x</sub>, CO, SO<sub>2</sub>, and VOM emissions.
- 5.1.2 For purposes of the 031600CRS (West Campus) and Title I of the Clean Air Act, this source is considered a single source with the University of Illinois at Chicago East Campus (031600CEV), located at 1140 South Morgan Street. The source has elected to obtain separate CAAPP permits for these locations.

### 5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:
  - a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
  - b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

#### 5.2.3 Ozone Depleting Substances

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

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

- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

#### 5.2.4 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [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 Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

- 5.2.5 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC 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 40 CFR Part 70 or 71.
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

#### 5.2.6 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the

Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
  - i. Illinois EPA, Compliance Section; and
  - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
  - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.7 This stationary source has a pollutant-specific emissions unit that is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources. The source must submit a CAM plan for each affected pollutant-specific emissions unit upon application for renewal of the initial CAAPP permit, or upon a significant modification to the CAAPP permit for the construction or modification of a large pollutant-specific emissions unit which has the potential post-control device emissions of the applicable regulated air pollutant that equals or exceeds major source threshold levels.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

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

None

## 5.5 Source-Wide Emission Limitations

### 5.5.1 Permitted Emissions for Fees

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 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

#### Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	48.71
Sulfur Dioxide (SO <sub>2</sub> )	284.96
Particulate Matter (PM)	59.40
Nitrogen Oxides (NO <sub>x</sub> )	398.95
HAP, not included in VOM or PM	-----
Total	792.02

### 5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

### 5.5.3 Other Source-Wide Emission Limitations

- a. The limits on emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, SO<sub>2</sub>, and VOM have been established in Construction Permit 98100093 pursuant to the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, and the Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 Ill. Adm. Code Part 203. These limits ensure that the construction/modification addressed in this Construction Permit does not constitute a new major source or major modification pursuant to 35 Ill. Adm. Code Part 203. See Conditions 7.2.6 and 7.3.6 for specific emission limits.
- b. Net emissions increases/decreases for both East and West Campuses (respectively, ID's 031600CEV and 031600CRS) are established in Attachment 1.

## 5.6 General Recordkeeping Requirements

### 5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

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

### 5.6.2 Retention and Availability of Records

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

## 5.7 General Reporting Requirements

### 5.7.1 General Source-Wide Reporting Requirements

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

### 5.7.2 Annual Emissions Report

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

## 5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

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

## 6.0 EMISSIONS REDUCTION MARKET SYSTEM (ERMS)

### 6.1 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 shall 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).

### 6.2 Applicability

This source is considered a "participating source" for purposes of the ERMS, 35 IAC Part 205.

### 6.3 Obligation to Hold Allotment Trading Units (ATUs)

- a. Pursuant to 35 IAC 205.150(c)(1) and 35 IAC 205.720, and as further addressed by Condition 6.8, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30), not including VOM emissions from the following, or the source shall be subject to "emissions excursion compensation," as described in Condition 6.5.
  - i. VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit, in accordance with 35 IAC 205.220;
  - ii. Excess VOM emissions associated with startup, malfunction, or breakdown of an emission unit as authorized in Section 7.0 of this permit, in accordance with 35 IAC 205.225;
  - iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3);
  - iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 IAC 205.750; and
  - v. VOM emissions from certain new and modified emission units as addressed by Condition 6.8(b), if applicable, in accordance with 35 IAC 205.320(f).
- b. Notwithstanding the above condition, in accordance with 35 IAC 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 IAC Part 203, the source shall hold ATUs in an amount not less than 1.3 times its seasonal VOM emissions attributable to such major modification during the seasonal allotment period, determined in accordance with the construction permit for such major modification or applicable provisions in Section 7.0 of this permit.

### 6.4 Market Transactions

- a. The source shall apply to the Illinois EPA for and obtain authorization for a Transaction Account prior to conducting any market transactions, as specified at 35 IAC 205.610(a).
- b. The Permittee shall promptly submit to the Illinois EPA any revisions to the information submitted for its Transaction Account, pursuant to 35 IAC 205.610(b).

- c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 IAC 205.620(a).
- d. Any transfer of ATUs to or from the source from another source or general participant must be authorized by a qualified Account Officer designated by the source and approved by the Illinois EPA, in accordance with 35 IAC 205.620, and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

#### 6.5 Emissions Excursion Compensation

Pursuant to 35 IAC 205.720, if the source fails to hold ATUs in accordance with Condition 6.3, it shall provide emissions excursion compensation in accordance with the following:

- a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the ACMA in the amount specified by the notice, as follows:
  - i. The purchase of ATUs shall be in an amount equivalent to 1.2 times the emissions excursion; or
  - ii. If the source had an emissions excursion for the seasonal allotment period immediately before the period for the present emissions excursion, the source shall purchase ATUs in an amount equivalent to 1.5 times the emissions excursion.
- b. If requested in accordance with paragraph (c) below or in the event that the ACMA balance is not adequate to cover the total emissions excursion amount, the Illinois EPA will deduct ATUs equivalent to the specified amount or any remaining portion thereof from the ATUs to be issued to the source for the next seasonal allotment period.
- c. Pursuant to 35 IAC 205.720(c), within 15 days after receipt of an Excursion Compensation Notice, the owner or operator may request that ATUs equivalent to the amount specified be deducted from the source's next seasonal allotment by the Illinois EPA, rather than purchased from the ACMA.

#### 6.6 Quantification of Seasonal VOM Emissions

- a. The methods and procedures specified in Sections 5 and 7 of this permit for determining VOM emissions and compliance with VOM emission limitations shall be used for determining seasonal VOM emissions for purposes of the ERMS, with the following exceptions [35 IAC 205.315(b)]:

No exceptions

- b. The Permittee shall report emergency conditions at the source to the Illinois EPA, in accordance with 35 IAC 205.750, if the Permittee intends to deduct VOM emissions in excess of the technology-based emission rates normally achieved that are attributable to the emergency from the source's seasonal VOM emissions for purposes of the ERMS. These reports shall include the information specified by 35 IAC 205.750(a), and shall be submitted in accordance with the following:
  - i. An initial emergency conditions report within two days after the time when such excess emissions occurred due to the emergency; and
  - ii. A final emergency conditions report, if needed to supplement the initial report, within 10 days after the conclusion of the emergency.

#### 6.7 Annual Account Reporting

- a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emissions Report, seasonal VOM emissions information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 IAC 205.300]:
  - i. Actual seasonal emissions of VOM from the source;
  - ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;
  - iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 IAC 205.337;
  - iv. If a source has experienced an emergency, as provided in 35 IAC 205.750, the report shall reference the associated emergency conditions report that has been approved by the Illinois EPA;
  - v. If a source's baseline emissions have been adjusted due to a Variance, Consent Order, or CAAPP permit Compliance Schedule, as provided for in 35 IAC 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 IAC 205.320(e)(3); and
  - vi. If a source is operating a new or modified emission unit for which three years of operational data is not

yet available, as specified in 35 IAC 205.320(f), the report shall specify seasonal VOM emissions attributable to the new emission unit or the modification of the emission unit.

- b. This report shall be submitted by October 31 of each year, for the preceding seasonal allotment period.

6.8 Allotment of ATUs to the Source

- a.
  - i. The allotment of ATUs to this source is 3 ATUs per seasonal allotment period.
  - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 0.2429 tons per season.
  - iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 IAC 205.405, including units complying with MACT or using BAT, as identified in Condition 6.11 of this permit.
  - iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.
  - v. Condition 6.3(a) becomes effective beginning in the seasonal allotment period following the initial issuance of ATUs by the Illinois EPA into the Transaction Account for the source.

b. Contingent Allotments for New or Modified Emission Units

The source was issued a construction permit prior to January 1, 1998 for the following new or modified emission units for which three years of operational data is not yet available:

None

- c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 IAC Part 205, including:
  - i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 IAC 205.630;
  - ii. Deduction of ATUs as a consequence of emissions excursion compensation, in accordance with 35 IAC 205.720; and

- iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 IAC 205.410.

#### 6.9 Recordkeeping for ERMS

The Permittee shall maintain copies of the following documents as its Compliance Master File for purposes of the ERMS [35 IAC 205.700(a)]:

- a. Seasonal component of the Annual Emissions Report;
- b. Information on actual VOM emissions, as specified in detail in Sections 5 and 7 of this permit and Condition 6.6(a); and
- c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

#### 6.10 Exclusions from Further Reductions

- a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 IAC 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 IAC 205.405(a)]:
  - i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the CAA;
  - ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units, and internal combustion engines; and
  - iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because they meet the criteria as indicated above [35 IAC 205.405(a) and (c)]:

Engines  
Boilers  
Turbines

- b. VOM emissions from emission units using BAT for controlling VOM emissions shall not be subject to the VOM emissions reductions requirement specified in 35 IAC

205.400(c) or (e) as long as such emission unit continues to use such BAT [35 IAC 205.405(b)].

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because these emission units use BAT for controlling VOM emissions as indicated above [35 IAC 205.405(b) and (c)]:

None

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 1: Boilers

7.1.1 Description

Seven natural gas-fired/fuel oil #6 boilers supply steam, for the needs of this source.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 1	<u>Building 921</u>	
	Boiler #1 (97.1 mmBtu/Hr)	None
	Boiler #2 (97.1 mmBtu/Hr)	None
	Boiler #3 (97.1 mmBtu/Hr)	None
	Boiler #4 (97.1 mmBtu/Hr)	None
	Boiler #5 (97.1 mmBtu/Hr)	None
	Boiler #6 (128.45 mmBtu/Hr)	None
	Boiler #7 (90.58 mmBtu/Hr)	None

7.1.3 Applicability Provisions and Applicable Regulations

- a. An "affected boiler" for the purpose of these unit specific conditions, is the boiler described in Conditions 7.1.1 and 7.1.2.
- b. All affected boilers are subject to 35 IAC 216.121. No person shall cause or allow the emission of carbon monoxide into the atmosphere from any fuel combustion emission source with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected 50 percent excess air.
- c. All affected boilers are subject to the following limitation of 35 IAC 212.206:
  - No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.15 kg of particulate matter per MW-hr of actual heat input from any fuel combustion emission unit using liquid fuel exclusively (0.10 lb/mmBtu).
- d. All affected boilers shall not exceed 1.55 kg of sulfur dioxide per MW-hr of actual heat input when residual fuel oil is burned (1.0 lb/mmBtu), pursuant to 35 IAC 214.122(b)(1) and 35 IAC 214.161(a).
- e. For all affected boilers, the opacity limit shall not exceed the following: 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 35 IAC 212.122 [35 IAC 212.123(a)].

7.1.4 Non-Applicability of Regulations of Concern

- a. Pursuant to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC Part 218, Subpart G: Use of Organic Material.
- b. Neither of the affected boilers is subject to 40 CFR Part 60, Subpart Dc "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units" and Subpart Db "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units" because all these boilers had been constructed prior to June 9, 1989 and June 19, 1984, respectively.
- c. This permit is issued based on the each affected boiler not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.1.5 Operating Requirements and Work Practices

- a. Each affected boiler shall only be operated with natural gas or fuel oil #6 as the fuel.
- b. The four affected boilers ##1,2,3, and 4 shall permanently cease operation prior to the initial startup of the three turbines with duct burners (see Subsection 7.3 of this permit) and three engines (see Subsection 7.2 of this permit).

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, the affected boilers shall not exceed the following limits:

None

7.1.7 Testing Requirements

None

7.1.8 Monitoring Requirements

None

#### 7.1.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected boilers to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. Total natural gas usage for all affected boilers (mmscf/mo and mmscf/yr);
- b. Total fuel oil #6 usage for all affected boilers (gal/mo and gal/yr);
- c. Sulfur content, wt.%, based on the fuel oil #6 supplier certification records; and
- d. Monthly and annual emissions of regulated air pollutants as calculated in accordance with compliance procedures in Condition 7.1.12.

#### 7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the emission limitations as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

If there is an exceedance of the emission limitations in Conditions 5.5.1 and 7.1.3, as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

#### 7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

#### 7.1.12 Compliance Procedures

- a. Compliance with Condition 7.1.3 is assumed to be achieved by work-practices inherent in operation of affected boilers, so that no compliance procedures are set in the permit addressing this regulation.
- b. Compliance with the emission limits in Condition 5.5.1 shall be based on the following emission factors:

i. Natural Gas Mode

Pollutant	Emission Factor (lb/mmscf)	
	Heat Input > 100.0 mmBtu/hr	Heat Input < 100.0 mmBtu/hr
PM	7.6	7.6
NO <sub>x</sub>	280.0	100
VOM	5.5	5.5
CO	84.0	84.0
SO <sub>2</sub>	0.6	0.6

These are the emission factors for uncontrolled natural gas combustion in large (> 100 mmBtu/hr) and small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, March 1998.

ii. Fuel Oil #6 Mode

Pollutant	Emission Factor (lb/1,000 gal)
NO <sub>x</sub>	55
SO <sub>2</sub>	157S**
CO	5
VOM	0.28
PM	7.72

These are the emission factors for fuel oil #6, Table 1.3-1, AP-42, September 1998.

\*\* "S" indicates that the weight % of sulfur in the oil should be multiplied by the value given. With the fuel with 0.5% sulfur, "S" = 0.5.

7.2 Unit 2: Engines/Generators

7.2.1 Description

Natural gas-fired reciprocating engines/generators are planned to use at the source to produce electricity and power. Each engine has a maximum power output of 5 MW. Engine/Generators #1, #2, and #3 are equipped with low temperature catalytic converters to control carbon monoxide and volatile organic material emissions.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 2	Wartsila Model No. 18V28 (or Equivalent), 5 MW Natural Gas-Fired Engines #1-#3	Catalytic Converter (Per Each Unit)

7.2.3 Applicability Provisions and Applicable Regulations

- a. An "affected engine/generator" for the purpose of these unit specific conditions, is the unit described in Conditions 7.2.1 and 7.2.2.
- b. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm, [35 Ill. Adm. Code 214.301].
- c. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exemption: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall only apply to photochemically reactive material 35 Ill. Adm. Code 218.301].
- d.
  - 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 other than those emission units subject to 35 IAC 212.122.
  - 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 minutes period, provided that such opaque emissions permitted during any 60 minute

period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such emission unit shall be limited to 3 times in any 24 hours [35 IAC 212.123].

#### 7.2.4 Non-Applicability of Regulations of Concern

The affected engine/generator is not subject to the following requirements:

- a. The affected engine/generator is not subject to the requirements of 35 IAC 212.321 because it does not have a process weight rate as defined in 35 IAC 211.5250.
- b. The affected engines/generators are not subject to 35 Ill. Adm. Code 216.121, emissions of carbon monoxide from fuel combustion emission units, because the affected engines/generators are not by definition fuel combustion emission units.
- c. The affected engines/generators are not subject to 35 Ill. Adm. Code 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input of each unit is less than 73.2 MW (250 mmBtu/hr) and the affected engines are not by definition fuel combustion emission units.

#### 7.2.5 Operating Requirements and Work Practices

- a. The catalytic converters shall be operated to control emissions of carbon monoxide (CO) and volatile organic material (VOM) at all times the affected engines are in operation.
- b. The Permittee shall follow good operating practices for the catalytic converters, including periodic inspection, routine maintenance and prompt repair of defects.
- c. The affected engines shall only be operated with natural gas as the fuel.

#### 7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, all affected engines/generators are limited to the following:

- a. Operation and Power Output (per each unit):

	Rated Output (MW)	Operating Hours (hrs/yr)
Generators #1-#3	5	3,066

b. Emissions:

i. Hourly Emissions (Per Each Unit):

	CO (lb/hr)	NO <sub>x</sub> (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	VOM (lb/hr)
Generator #1-#3	6.52	7.24	0.74	4.23	4.69

ii. Annual Emissions (Per Unit and Totals):

	CO (T/yr)	NO <sub>x</sub> (T/yr)	PM <sub>10</sub> (T/yr)	SO <sub>2</sub> (T/yr)	VOM (T/yr)
Generator #1-#3	10.00	11.10	1.13	6.49	7.19
<u>Totals:</u>	30.00	33.30	3.39	19.47	21.57

c. The above limitations were established in Permit 98100093, pursuant to 35 IAC Part 203 and 40 CFR 52.21. 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 35 IAC Part 203 and 40 CFR 52.21[T1].

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).

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

The Permittee shall install and operate a continuous monitoring system to monitor and record the electrical output of each affected engine.

7.2.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected diesel generators to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

a. Records addressing use of good operating practices for the catalytic converters:

- i. Records for periodic inspection of the catalytic converters with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- b. Electric output of each affected engine, kW-hr/mo, and kW-hr/yr;
- c. Hours of operation for each engine (per month and per year);
- d. Monthly and annual aggregate CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the affected engines shall be maintained, based on the electrical output of the affected engine and the applicable emission factors, with supporting calculations as calculated in accordance with compliance procedures in Condition 7.2.12.

#### 7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the emission limitations as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

If there is an exceedance of the emission limitations in Conditions 7.2.3, 7.2.5 and 7.2.6, as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.

#### 7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

#### 7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.3 is assumed to be achieved by work-practices inherent in operation of affected engines/generators, including proper operations of the catalytic converters, so that no

compliance procedures are set in the permit addressing this regulation.

- b. Compliance with the emission limits of Conditions 5.5.1 and 7.2.6 shall be based on the emission factors listed below:

- i. SO<sub>2</sub> Emissions:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(g/kW-hr)</u>
SO <sub>2</sub>	0.384

This is the uncontrolled emission factors for the Wartsila Model 18V28 natural gas reciprocating engine and were supplied by the manufacturer/vendor.

Generator Emissions (lb) = (Electrical Output, kW-hr) x (The Appropriate Emission Factor, g/kW-hr) x (1 lb/453.59 g)

- ii. The emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, and VOM from each affected engine shall be determined based on the uncontrolled hourly emission rates of 38.3614, 7.242, 0.739, and 17.3712 lb/hr, respectively, which are the emission rates guaranteed by the manufacturer/vendor.

7.3 Unit 3: Turbines (3 units with 3 Duct Burners)

7.3.1 Description

Gas Turbines are planned to use at this source to produce power and steam. The turbines are natural gas fired, each with a maximum rating of 7 MW. The turbines are each equipped with a duct burner rated at 88 mmBtu/hr to boost exhaust temperatures for steam production.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Unit 3	Turbines (3 Units with 3 Duct Burners)	None

7.3.3 Applicability Provisions and Applicable Regulations

- a. An "affected turbine" for the purpose of these unit specific conditions, is the unit described in Conditions 7.3.1 and 7.3.2.
- b. The emission of smoke or other particulate matter from any emission unit shall not exceed an opacity of greater than 30 percent, except that an opacity of greater than 30 percent but less than 60 percent shall be allowed 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 305 meter (1000 feet) radius from the center point of any other such emission unit owned or operated by the Permittee, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period, pursuant to 35 Ill. Adm. Code 212.123 and 212.124.
- c. The affected gas turbines are subject to the New Source Performance Standard (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 gas turbine commenced construction, modification, or reconstruction after October 3, 1977, and that has a peak load less than or equal to 107.2 gigajoules per hour (100 mmBtu/hr). The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.

- i. Pursuant to 40 CFR 60.332(a)(2) and 60.332(c), no owner or operator of an affected gas turbine with a heat input at peak load equal to or greater than 10.7 gigajoules per hour (10 million Btu/hour) but less than or equal to 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall cause to be discharged into the atmosphere from such gas turbine, any gases which contain nitrogen oxides in excess of:

$$\text{STD} = 0.015 \frac{(14.4)}{Y} + F$$

Where:

STD = Allowable NO<sub>x</sub> 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<sub>x</sub> emission allowance for fuel-bound nitrogen calculated from the nitrogen content of the fuel as follows:

Fuel-Bound Nitrogen (Percent by Weight)	F (NO <sub>x</sub> Percent by Volume)
N < 0.015	0
0.015 < N ≤ 0.1	0.04 (N)
0.1 < N ≤ 0.25	0.04 + 0.0067(N - 0.1)
N > 0.25	0.005

Where:

N = The nitrogen content of the fuel (percent by weight) determined in accordance with Condition 2.3.7(e).

- ii. Standard for Sulfur Dioxide

A. No owner or operator subject to the provisions of 40 CFR 60 Subpart GG 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 [40 CFR 60.333(a)].

B. No owner or operator subject to the provisions of 40 CFR 60 Subpart GG shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight [40 CFR 60.333(b)].

- d. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 Ill. Adm. Code 214.301].
- e. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exemption: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall only apply to photochemically reactive material [35 Ill. Adm. Code 218.301].

#### 7.3.4 Non-Applicability of Regulations of Concern

- a. The affected gas turbines are not subject to 35 Ill. Adm. Code 216.121, emissions of carbon monoxide from fuel combustion emission units, because the affected gas turbines are not by definition fuel combustion emission units.
- b. The affected gas turbines are not subject to 35 Ill. Adm. Code 217.121, emissions of nitrogen oxides from new fuel combustion emission sources, because the actual heat input of each unit is less than 73.2 MW (250 mmBtu/hr) and the affected gas turbines are not by definition fuel combustion emission units.
- c. This permit is issued based on the affected gas turbines not being subject to 35 Ill. Adm. Code 212.321 because due to the unique nature of this processes, such rules cannot reasonably be applied.
- d. This permit is issued based on the each affected turbine not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.3.5 Operating Requirements and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected gas turbine in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source [40 CFR 60.11(d)].
- b. The affected gas turbines shall only be operated with natural gas as the fuel.

7.3.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.1, the affected turbines are limited to the following:

a. Fuel Usage:

<u>Unit</u>	<u>Fuel Usage (Mft<sup>3</sup>/mo)</u>	<u>Fuel Usage (Mft<sup>3</sup>/yr)</u>
Gas Turbines #1-#3 (Combined)	322.89	1,937.34
Duct Burners #1-#3 (Combined)	280.91	1,685.43

b. Emissions:

- i. Emissions of Carbon Monoxide (CO) and Volatile Organic Material (VOM):

<u>Unit</u>	E M I S S I O N S		C O V O M	
	<u>(T/mo)</u>	<u>(T/yr)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>
Gas Turbines #1-#3 (Combined)	17.73	106.36	1.42	8.54
Duct Burners #1-#3 (Combined)	10.11	<u>60.68</u>	2.40	<u>14.41</u>
Totals		<u>167.04</u>		<u>22.95</u>

These limits are based on representations of the maximum actual emissions determined from emission factors supplied by the manufacturer/vendor of the affected gas turbine equipment, the maximum annual fuel usage, and a lower heating value heat content of natural gas of 900 Btu/ft<sup>3</sup>.

ii. Emissions of Nitrogen Oxides (NO<sub>x</sub>) and Sulfur Dioxide (SO<sub>2</sub>):

<u>Unit</u>	<u>NO<sub>x</sub></u>		<u>SO<sub>2</sub></u>	
	<u>(T/mo)</u>	<u>(T/yr)</u>	<u>(T/mo)</u>	<u>(T/yr)</u>
Gas Turbines #1-#3 (Combined)	14.53	87.18	1.37	8.19
Duct Burners #1-#3 (Combined)	13.90	<u>83.43</u>	0.08	<u>0.46</u>
Totals		170.61		8.65

These limits are based on representations of the maximum actual emissions determined from emission factors supplied by the manufacturer/vendor of the affected gas turbine equipment, the standard emission factor for SO<sub>2</sub> for both the gas turbine and duct burner, the maximum firing rates, and a lower heating value heat content of natural gas of 900 Btu/ft<sup>3</sup>.

iii. Emissions of Particulate Matter less than 10 Microns (PM<sub>10</sub>):

<u>Unit</u>	<u>PM<sub>10</sub></u>	
	<u>(T/mo)</u>	<u>(T/yr)</u>
Gas Turbines #1-#3 (Combined)	3.63	21.77
<u>Duct Burners #1-#3 (Combined)</u>	1.26	<u>7.58</u>
Totals		29.35

These limits are based on representations of the maximum actual emissions determined from emission factors supplied by the manufacturer/vendor of the affected gas turbine equipment, the maximum annual fuel usage, and a lower heating value heat content of natural gas of 900 Btu/ft<sup>3</sup>.

c. 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).

d. The above limitations were established in Permit 98100093, pursuant to 35 IAC Part 203 and 40 CFR 52.21. 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 35 IAC Part 203 and 40 CFR 52.21[T1].

### 7.3.7 Testing Requirements

- a. To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 percent and are approved by the Illinois EPA or the USEPA to determine the nitrogen content of the fuel being fired [40 CFR 60.335(a)].
- b. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in this section, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.335(f) [40 CFR 60.335(b)].
- c. Pursuant to 40 CFR 60.335(c), the owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in Special Condition 7.3.3(c)(i) and (ii) (see also 40 CFR 60.332 and 60.333(a)) as follows:
  - i. Pursuant to 40 CFR 60.335(c)(1), the nitrogen oxides emission rate ( $\text{NO}_x$ ) shall be computed for each run using the following equation:

$$\text{NO}_x = (\text{NO}_x)(P_c / P_o) 0.5e^{19(H_o - 0.00633) / (288K/T_a)^{1.53}}$$

Where:

$\text{NO}_x$  = Emission rate of  $\text{NO}_x$  at 15 percent  $\text{O}_2$  and ISO standard ambient conditions, volume percent.

$\text{NO}_{x0}$  = Observed  $\text{NO}_x$  concentration, ppm by volume.

$P_r$  = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mmHg.

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

$H_o$  = Observed humidity of ambient air, g  $\text{H}_2\text{O}/\text{g}$  air.

$e$  = Transcendental constant, 2.718.

$T_a$  = Ambient temperature, °K.

- ii. The monitoring device of Condition 7.3.8(a) (see also 40 CFR 60.334(a)) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with Condition No. 7.3.3(c)(i) (see also 40 CFR 60.332) at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer [40 CFR 60.335(c)(2)].
- iii. Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO<sub>x</sub> emissions shall be determined at each of the load conditions specified in Conditions 7.3.7(c)(i) and (c)(ii) (see also 40 CFR 60.335(c)(2)) [40 CFR 60.335(c)(3)].
- d. The owner or operator shall determine compliance with the sulfur content standard in Condition 7.3.3(c)(ii) (See also 40 CFR 60.333(b)) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels. 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 approval of the Illinois EPA and/or USEPA [40 CFR 60.335(d)].
- e. To meet the requirements of Condition 7.3.8 (see also 40 CFR 60.334(b)), the owner or operator shall use the methods specified in Condition 7.3.7 (see also 40 CFR 60.335(a) and (d)) to determine the nitrogen and sulfur contents of the fuel being burned. The analysis 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 [40 CFR 60.335(e)].
- f. Pursuant to 40 CFR 60.335(f), the owner or operator may use the following as alternatives to the reference methods and procedures specified in Condition 7.3.7 (see also 40 CFR 60.335):

Instead of using the equation in Condition 7.3.7(c)(i) (see also 40 CFR 60.335(b)(1)), 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. These factors are developed for each gas turbine model they manufacture in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the Illinois EPA and/or USEPA before the initial performance test required by 40 CFR 60.8. Notices of approval of custom ambient condition correction factors will be published in the Federal Register [40 CFR 60.335(f)(1)].

#### 7.3.8 Monitoring Requirements

- a. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60 Subpart GG and using water injection to control NO<sub>x</sub> emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine. This system shall be accurate to within ±5.0 percent and shall be approved by the Illinois EPA and/or USEPA [40 CFR 60.334(a)].
- b. The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60 Subpart GG shall monitor sulfur content and nitrogen content of the fuel being fired in an affected gas turbine. The frequency of determination of these values shall be determined and recorded daily if the turbine is supplied its fuel without intermediate bulk storage. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Illinois EPA and/or USEPA before they can be used [40 CFR 60.334(b)(2)].

#### 7.3.9 Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected turbines to demonstrate compliance with conditions of this permit, pursuant to Section 39.5(7)(b) of the Act:

- a. A file that includes the nitrogen content of the fuel relied upon, if greater than zero, to determine the applicable standard pursuant to Condition 7.3.3(c)(i)

and show compliance with such standard and the hourly emission limit pursuant to Condition 7.3.6.

- b. Records of the testing pursuant to Condition 7.3.7, which include the following [Section 39.5(7)(e) of the Act]:
  - i. The date, place and time of sampling or measurements;
  - ii. The date(s) analyses were performed;
  - iii. The company or entity that performed the analyses;
  - iv. The analytical techniques or methods used;
  - v. The results of such analyses; and
  - vi. The operating conditions as existing at the time of sampling or measurement.
- c. Natural gas fuel usage for each affected gas turbine, ft<sup>3</sup>/mo and ft<sup>3</sup>/yr;
- d. The nitrogen content of the fuel to be used in the affected gas turbine recorded on a daily basis, except as provided in Condition 7.3.8(b);
- e. The sulfur content of the fuel to be used in the affected gas turbine as monitored pursuant to Condition 7.3.8(b);
- f. The heat content of the fuel used in the affected gas turbine, Btu/ft<sup>3</sup>; and
- g. Monthly and annual aggregate CO, NO<sub>x</sub>, PM<sub>10</sub>, SO<sub>2</sub>, and VOM emissions from the affected gas turbines shall be maintained, based on fuel consumption, the applicable emission factors with supporting calculations, and compliance procedures in Condition 7.3.12.

#### 7.3.10 Reporting Requirements

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

- a. Pursuant to 40 CFR 60.334(c), periods of excess emissions that shall be reported are defined as follows:

- i. Nitrogen oxides. Any period in which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required by Condition 7.3.7. Each report shall include the average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under Condition 7.3.7(a) (see also 40 CFR 60.335(a)) [40 CFR 60.334(c)(1)].
  - ii. Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine may not comply with Condition 7.3.3(c)(ii) [40 CFR 60.334(c)(2)].
- b. Emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, SO<sub>2</sub>, and/or VOM from the affected gas turbine in excess of the limits specified in Condition No. 7.3.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.3 is assumed to be achieved by work-practices inherent in operation of affected turbines, so that no compliance procedures are set in the permit addressing this regulation.
- b. To determine compliance with Conditions 5.5.1 and 7.3.6, natural gas combustion emissions from the Gas Turbines #1, #2, and #3 shall be calculated based on the following emission factors:
  - i. Carbon monoxide (CO), nitrogen oxide (NO<sub>x</sub>), and volatile organic material (VOM) emissions:

<u>Pollutant</u>	<u>Emission Factor (lb/mmBtu)</u>
CO	0.122
NO <sub>x</sub>	0.10
PM <sub>10</sub>	0.024
VOM	0.0098

These are the factors for uncontrolled emission factors for the Solar Model Taurus

70-T9702S natural gas-fired gas turbine based on the lower heating value of natural gas and were supplied by the manufacturer/vender.

Gas Turbine Emissions (lb) = (Natural Gas Consumed, ft<sup>3</sup>) x (Lower Heating Value Heat Content, Btu/ft<sup>3</sup>) x (1 mmBtu/1,000,000 Btu) x (The Appropriate Emission Factor, lb/mmBtu)

ii. Sulfur Dioxide (SO<sub>2</sub>) emissions:

<u>Pollutant</u>	<u>Emission Factor (lb/mmBtu)</u>
SO <sub>2</sub>	0.94 S

This is the emission factor for uncontrolled gas turbines, Table 3.1-1, AP-42, Volume 1, Fifth Edition, October, 1996. S indicates that the weight % sulfur in the fuel should be multiplied by the value given.

Gas Turbine Emissions (lb) = (Natural Gas Consumed, ft<sup>3</sup>) x (Lower Heating Value Heat Content, Btu/ft<sup>3</sup>) x (1 mmBtu/1,000,000 Btu) x (The Appropriate Emission Factor, lb/mmBtu)

c. To determine compliance with Conditions 5.5.1 and 7.3.6, natural gas combustion emissions from the Duct Burners #1, #2, and #3 shall be calculated based on the following emission factors:

i. Carbon Monoxide (CO), Nitrogen Oxide (NO<sub>x</sub>), Particulate Matter less than 10 Microns (PM<sub>10</sub>), and Volatile Organic Material (VOM) emissions:

<u>Pollutant</u>	<u>Emission Factor (lb/mmBtu)</u>
CO	0.08
NO <sub>x</sub>	0.11
PM <sub>10</sub>	0.01
VOM	0.019

These are the factors for uncontrolled emission from the natural gas-fired duct burners based on the lower heating value of natural gas as provided by the manufacturer/vender.

Duct Burner Emissions (lb) = (Natural Gas Consumed, ft<sup>3</sup>) x (Lower Heating Value Heat Content, Btu/ft<sup>3</sup>) x (1 mmBtu/1,000,000 Btu) x (The Appropriate Emission Factor, lb/mmBtu)

ii. Sulfur Dioxide (SO<sub>2</sub>) emissions:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/Mft<sup>3</sup>)</u>
SO <sub>2</sub>	0.0006

This is the emission factor for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Table 1.4-2, AP-42, Volume 1, Fifth Edition, Supplement D March, 1998.

Duct Burner Emissions (lb) = (Natural Gas Consumed, ft<sup>3</sup>) x (1 ft<sup>3</sup>/1,000,000 Mft<sup>3</sup>) x (The Appropriate Emission Factor, lb/Mft<sup>3</sup>)

7.4 Unit 4: Pathological and General Waste Incinerators

7.4.1 Description

Three pathological/general waste incinerators are used for disposal of waste generated on site.

7.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Equipment	Description	Emission Control Equipment
Unit 4	Incinerator #1	Pathological Waste, Two Chamber Unit with a Maximum Charging Waste Design Capacity 200 lb/hr	None
	Incinerator #2	Pathological/Animal Waste, Two Chamber Unit with a Maximum Charging Waste Design Capacity 200 lb/hr	None
	Incinerator #3	Pathological Waste, Two Chamber Unit with a Maximum Charging Waste Design Capacity 100 lb/hr	None

7.4.3 Applicability Provisions and Applicable Regulations

- a. An "affected incinerator" for the purpose of these unit specific conditions, is an incinerator described in Conditions 7.4.1 and 7.4.2.
- b. No person shall cause or allow the emission of particulate matter into the atmosphere from all incinerators (other than described in 35 IAC 212.181(a) and (b)) for which construction or modification commenced on or after April 14, 1972, to exceed 229 mg/scm (0.1 gr/scf) of effluent gases corrected to 12 percent carbon dioxide [35 IAC 212.181(d)].
- c. Emissions of CO from any incinerator shall not exceed 500 ppm, corrected to 50 percent excess air [35 IAC 216.141].

7.4.4 Non-Applicability of Regulations of Concern

- a. Each affected incinerator is not subject to emission limitations 35 IAC Part 229 " Hospital, Medical & Infectious Waste Incinerators" because these

incinerators are qualified for co-fired combustor exemption (less than 10 percent or less of the weight charged is comprised, in aggregate, of hospital waste and medical/infectious waste), as defined in 35 IAC 229.102 and 229.110(d).

- b. This permit is issued based on the affected incinerator not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM), because the affected incinerator does not use an add-on control device to achieve compliance with an emission limitation or standard.

#### 7.4.5 Operating Requirements and Work Practices

- a. Only pathological waste, general waste, and all other wastes not considered medical/infectious waste under 35 IAC Part 229 are allowed to charge into each affected incinerator at the rate not exceeding limits established in Condition 7.4.2. Such non-medical/infectious wastes shall comprise at least 90% of weight of all wastes introduced into each affected incinerator.
- b.
  - i. The secondary combustion chamber of affected incinerator shall be preheated to the 1400<sup>0</sup>F prior to introducing waste into the incinerator.
  - ii. This temperature shall be maintained until burnout of waste in the primary chamber is completed.
- c. The condition of affected incinerator shall be inspected on a periodic basis for the presence of deficiencies and any deficiencies shall be expeditiously repaired or an incinerator taken out of service.

#### 7.4.6 Emission Limitations

In addition to Condition 5.2.2, the source wide limitations in Condition 5.5.1, and limitations in Condition 7.4.3 the affected incinerator is subject to the following:

N/A

#### 7.4.7 Testing Requirements

Upon the Illinois EPA request, the following testing shall be performed on the affected incinerator:

- a. Pursuant to 35 IAC 212.110 and Section 39.5(7)(b) of the Act, testing for PM emissions shall be performed as follows:
  - i. Measurement of particulate matter emissions from stationary emission units subject to 35 IAC Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E [35 IAC 212.110(a)].
  - ii. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4 [35 IAC 212.110(b)].
  - iii. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 IAC Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.110(c)].
- b. Pursuant to 35 IAC 216.101 and upon written request by the Illinois EPA pursuant to Section 39.5(7)(b) of the Act, Carbon Monoxide concentrations in an effluent stream shall be measured by the non-dispersive infrared method or by other methods approved by the Illinois EPA according to the provisions of 35 IAC 201.

#### 7.4.8 Monitoring Requirements

The affected incinerator shall be equipped with a secondary combustion chamber temperature indicator with continuous recorder to allow verification of compliance with requirements of Condition 7.4.5(b).

#### 7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain the following records for each affected incinerator to demonstrate compliance with Conditions 5.5.1 and 7.4.5, pursuant to Section 39.5(7)(b) of the Act:

- a. A secondary combustion chamber temperature prior and during the time of operation;

- b. Type and amount of waste charged (lb/hr and tons/yr);
- c. The owner or operator of a co-fired combustor claiming an exemption pursuant to 35 IAC 229.110(d) shall maintain records on a calendar quarter basis of the relative weight of hospital and/or medical/infectious waste, and of all other waste combusted for each affected incinerator;
- d. Monthly and annual emissions from each affected incinerator, based on the amount of waste charged and the applicable emission factors, with supporting calculations;
- e. Operating logs for each affected incinerator, which include time of operation and operating temperature of the secondary chamber; and
- f. Inspection maintenance logs for incinerator, with dates of inspection, maintenance, repair, or other actions completed.
- g. Pursuant to 35 IAC 212.110(e) and Section 39.5(7)(e) of the Act, the owner or operator of an emission unit subject 35 IAC Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed and shall include the following:
  - i. The date, place and time of sampling or measurements;
  - ii. The date(s) analyses were performed;
  - iii. The company or entity that performed the analyses;
  - iv. The analytical techniques or methods used;
  - v. The results of such analyses; and
  - vi. The operating conditions as existing at the time of sampling or measurement.

#### 7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with any applicable requirements of this permit as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. Within 30 days for each occurrence when the affected incinerator was not operated in compliance with

requirements of Condition 7.4.5, with date, description and explanation;

- b. Within 90 days for each occurrence when the monitoring system required by Condition 7.4.8 was not in service prior to initially charging waste to an incinerator.

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

- a. Compliance with Condition 7.4.3 by affected incinerator is assumed to be achieved by compliance with operating requirements and work-practices specified by Condition 7.4.5.
- b. Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.3.9 and the emission factors and formulas listed below:

<u>Pollutant</u>	<u>Emission Factor (lb/Ton burned)</u>
PM	4.67
NO <sub>x</sub>	3.56
SO <sub>2</sub>	7.5

These are the emission factors of the pathological waste incineration for Solid Waste Disposal - Commercial/Institutional, FIRE Version 5.0 Source Classification Codes and Emission Factor Listing for Criteria Air Pollutants, SCC 50200505 Pathological Incineration, August, 1995.

## 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 April 25, 2002 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

### 8.3 Emissions Trading Programs

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

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

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

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

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this

permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
  - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

#### 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

## 8.6 Reporting Requirements

### 8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

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

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

### 8.6.2 Test Notifications

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

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

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

#### 8.6.3 Test Reports

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

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

#### 8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

- i. Illinois EPA - Air Compliance Section

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

- ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
P.O. Box 19506  
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

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

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

8.7 Obligation to Comply with Title I Requirements

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

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
  - i. At reasonable times, for the purposes of assuring permit compliance; or
  - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

#### 9.4 Obligation to Comply with Other Requirements

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

#### 9.5 Liability

##### 9.5.1 Title

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

##### 9.5.2 Liability of Permittee

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

##### 9.5.3 Structural Stability

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

##### 9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

#### 9.5.5 Property Rights

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

### 9.6 Recordkeeping

#### 9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

#### 9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

#### 9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

### 9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

### 9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

#### 9.9 Certification

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

#### 9.10 Defense to Enforcement Actions

##### 9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

##### 9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
  - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Normally, an act of God such as lightning or flood is considered an emergency;

- ii. The permitted source was at the time being properly operated;
  - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
  - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

#### 9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

#### 9.12 Reopening and Reissuing Permit for Cause

##### 9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

#### 9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

#### 9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

#### 9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

#### 9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

10.1 Attachment 1 - Net Emissions Increases/Decreases

Table 1

Previous Contemporaneous Emissions Increases

<u>Emission Unit/Activity</u>		<u>Permit</u>	<u>Date Issued</u>		
East Campus Boilers and Engines		97050128	December 1, 1997		
<u>CO</u> <u>(Ton/yr)</u>	<u>NO<sub>x</sub></u> <u>(Ton/yr)</u>	<u>PM<sub>10</sub></u> <u>(Ton/yr)</u>	<u>SO<sub>2</sub></u> <u>(Ton/yr)</u>	<u>VOM</u> <u>(Ton/yr)</u>	
+99.05	-40.7	-6.11	+21.47	+20.76	

Table 2

Historical Operation and Emissions from the Existing West Campus Boilers

Table 2a

1996-1997 Average Fuel Usage

<u>Emission Unit</u>	<u>Natural Gas Usage</u> <u>(Mft<sup>3</sup>/yr)</u>	<u>No. 6 Fuel Oil Usage</u> <u>(1,000 gal/yr)</u>
Boiler No. 1	51.3504	1,670.0490
Boiler No. 2	100.8295	2,060.5275
Boiler No. 3	61.1430	639.4780
Boiler No. 4	53.9524	564.9650

Table 2b

1996-1997 Average Emissions from the Existing West Campus Boilers

<u>Emission Unit</u>	<u>CO</u> <u>(Ton/yr)</u>	<u>E M I S S I O N S</u> <u>NO<sub>x</sub></u> <u>(Ton/yr)</u>	<u>PM<sub>10</sub></u> <u>(Ton/yr)</u>	<u>SO<sub>2</sub></u> <u>(Ton/yr)</u>	<u>VOM</u> <u>(Ton/yr)</u>
Boiler No. 1 (Gas)	2.16	7.19	0.20	0.02	0.14
Boiler No. 1 (Oil)	4.18	39.25	7.29	129.79	0.94
Boiler No. 2 (Gas)	4.23	14.12	0.38	0.03	0.28
Boiler No. 2 (Oil)	5.15	48.42	8.99	160.13	1.16
Boiler No. 3 (Gas)	2.57	8.56	0.23	0.02	0.17
Boiler No. 3 (Oil)	1.60	15.08	2.79	49.70	0.36
Boiler No. 4 (Gas)	2.27	7.55	0.21	0.02	0.15
<u>Boiler No. 4 (Oil)</u>	<u>1.41</u>	<u>13.28</u>	<u>2.46</u>	<u>43.91</u>	<u>0.32</u>
Totals	23.57	153.45	22.55	383.62	3.52

This table defines the actual emissions from natural gas and No. 6 fuel oil combustion from the existing West Campus boilers averaged over the calendar years 1996 and 1997 and are based on the actual fuel usage, standard emission factors, and a sulfur content for the fuel oil of 0.99 percent by weight.

Table 3

Emission Offsets from the Existing East Campus Generators

Table 3a

1996-1997 Average Operation and Emissions from Existing East Campus Generators

<u>Emission Unit</u>	Operating Hours (Hours/year)	E M I S S I O N S	
		CO (Ton/yr)	VOM (Ton/yr)
East Campus Generator #1	7,951.78	133.59	34.00
<u>East Campus Generator #2</u>	7,691.30	<u>131.14</u>	<u>19.61</u>
Totals		264.73	53.61

This table defines the actual emissions of carbon monoxide (CO) and volatile organic material (VOM) from the existing East Campus generators averaged over the calendar years 1996 and 1997 and are based on the actual operating hours and the emission rates determined from the most recent stack testing.

Table 3b

Future Permitted Emissions of the Existing East Campus Generators

<u>Emission Unit</u>	CO (T/yr)	VOM (T/yr)
East Campus Generator #1	20.04	9.90
<u>East Campus Generator #2</u>	<u>19.67</u>	<u>5.88</u>
Totals	39.71	15.78

This table defines the actual emissions of carbon monoxide (CO) and volatile organic material (VOM) from the existing East Campus generators based on the results of stack testing and the application of the catalytic converters with minimum control efficiencies of 85% for CO and 70% for VOM.

Table 3c

Net Change in Emissions from the Existing East Campus Generators

<u>Emission Unit</u>	CO (T/yr)	VOM (T/yr)
East Campus Generator #1 (Future Permitted, Table 3b)	20.04	9.90
East Campus Generator #2 (Future Permitted, Table 3b)	19.67	5.88
East Campus Generator #1 (Past Actual, Table 3a)	-133.59	-34.00
<u>East Campus Generator #2 (Past Actual, Table 3a)</u>	<u>-131.14</u>	<u>-19.61</u>
Totals	-225.02	-37.83

Table 4

Net Changes in Emissions

<u>Emission Unit</u>	<u>E</u> CO (T/yr)	<u>M</u>	<u>I</u> NO <sub>x</sub> (T/yr)	<u>S</u>	<u>S</u> PM <sub>10</sub> (T/yr)	<u>I</u>	<u>O</u> SO <sub>2</sub> (T/yr)	<u>N</u>	<u>S</u> VOM (T/yr)
Gas Turbines #1-#3 (Combined)	+ 106.36	+	87.18	+	21.77	+	8.19	+	8.54
Duct Burners #1-#3 (Combined)	+ 60.68	+	83.43	+	7.58	+	0.46	+	14.11
West Generators #1-3 (Combined)	+ 30.00	+	33.30	+	3.39	+	19.47	+	21.57
West Boilers No. #1-#4 (Combined)	- 23.56	-	153.39	-	22.54	-	383.61	-	3.52
East Generators #1 & #2 (Combined)*	- 225.02		-----		-----		-----		- 37.83
<u>Previous Contemporaneous Increase</u>	<u>+ 99.05</u>		<u>- 40.7</u>		<u>- 6.11</u>		<u>+ 21.47</u>		<u>+ 20.76</u>
Net Change in Emissions	+ 47.51	+	9.82	+	4.09	-	334.02	+	23.93

\* There will be no net change in emissions of nitrogen oxides (NO<sub>x</sub>), particulate matter less than 10 microns (PM<sub>10</sub>) or sulfur dioxides (SO<sub>2</sub>) as a result of the addition of catalytic converters to the existing East Campus Generators.

10.2 Attachment 2 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Official Title: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Date Signed: \_\_\_\_\_

### 10.3 Attachment 3 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
  - Corrects typographical errors;
  - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - Requires more frequent monitoring or reporting by the Permittee;
  - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA;
  - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
  - Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application of an approved economic incentives rule, marketable permits rule, or generic emissions trading rule.
2. Minor Permit Modification
  - Do not violate any applicable requirement;

- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
  - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA; and
- Are not required to be processed as a significant permit modification.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source' s suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;

- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



Illinois Environmental Protection Agency  
Division Of Air Pollution Control -- Permit Section  
P.O. Box 19506  
Springfield, Illinois 62794-9506

<b>Application For Construction Permit (For CAAPP Sources Only)</b>	<b>For Illinois EPA use only</b>
	I.D. number:
	Permit number:
	Date received:

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

<b>Source Information</b>		
1. Source name:		
2. Source street address:		
3. City:	4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No		
6. Township name:	7. County:	8. I.D. number:

<b>Owner Information</b>		
9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

<b>Operator Information (if different from owner)</b>		
14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

<b>Applicant Information</b>	
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator	20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

### Summary Of Application Contents

24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
25.	Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	<input type="checkbox"/> Yes <input type="checkbox"/> No
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No  <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

### Signature Block

This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30.	I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature:  BY: _____  <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%; text-align: center;">           _____  <small>AUTHORIZED SIGNATURE</small> </div> <div style="width: 45%; text-align: center;">           _____  <small>TITLE OF SIGNATORY</small> </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%; text-align: center;">           _____  <small>TYPED OR PRINTED NAME OF SIGNATORY</small> </div> <div style="width: 45%; text-align: center;">           _____ / _____ / _____  <small>DATE</small> </div> </div>

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

10.5 Attachment 5 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms.html>.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
P.O. Box 19506  
Springfield, Illinois 62794-9506