

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT¹

PERMITTEE

The University of Chicago
Attn: Duane G. Hickling
5555 South Ellis Avenue
Chicago, Illinois 60637

Application No.: 95080059

I.D. No.: 031600FLT

Applicant's Designation:

Date Received: August 15, 1995

Operation of: University Campus

Date Issued: November 7, 1997

Expiration Date: November 6, 2002

Source Location: 6101 South Blackstone Avenue, Chicago, Cook County

Responsible Official: Steve Beaudoin, Director, Office of Safety and Environmental Affairs

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

Revision Date Received: July 2, 2001

Revision Date Issued: September 24, 2001

Purpose of Revision: Minor Modification

This minor modification reflects revised fee table of Condition 5.5.1 with reduction of total allowable emissions to 366.43 tons per year.

This document only contains those portions of the entire CAAPP permit that have been revised as a result of this permitting action. 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 November 7, 1997 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
USEPA

¹ 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.

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

The University of Chicago
6101 South Blackstone Avenue
Chicago, Illinois 60637
773/702-9780

I.D. No.: 031600FLT

Standard Industrial Classification: 8221, Colleges & Universities

1.2 Owner/Parent Company

The University of Chicago
5801 South Ellis Avenue
Chicago, Illinois 60637

1.3 Operator

The University of Chicago
5801 South Ellis Avenue
Chicago, Illinois 60637

Contact Person's Name:
Steven Beaudoin
773/702-9999

1.4 General Source Description of Source

Steam is provided to the main campus buildings by the Steam Plant located at 6101 South Blackstone Avenue. In addition to this, there are also several satellite buildings with significant and insignificant emission units located within the campus. The university is a source of emissions from natural gas-fired boilers (with distillate fuel oil as backup), pathological waste incinerators used for on-site disposal, ethylene oxide sterilizers, and gasoline storage/dispensing operations.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

| | |
|-----------------|--|
| Act | Environmental Protection Act [415 ILCS 5/1 et seq.] |
| AP-42 | Compilation of Air Pollution Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through E), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717 |
| Btu | British thermal unit |
| CAA | Clean Air Act [42 U.S.C. Section 7401 et seq.] |
| CAAPP | Clean Air Act Permit Program |
| CFR | Code of Federal Regulations |
| CO | Carbon Monoxide |
| ft ³ | cubic foot |
| g | grams |
| gal | gallon |
| gr | grains |
| HAP | Hazardous Air Pollutant |
| HCl | Hydrogen Chloride |
| Hp | Horsepower |
| hr | hour |
| IAC | Illinois Administrative Code |
| I.D. No. | Identification Number of Source, assigned by Illinois EPA |
| Illinois EPA | Illinois Environmental Protection Agency |
| °F | degrees Fahrenheit |
| kg | kilogram |
| lb | pound |
| LEL | Lower Explosive Limit |
| m | meter |
| MBtu | Million Btus |
| Mg | Megagrams |
| mg | milligrams |
| MW | Megawatts |
| NSPS | New Source Performance Standards |
| NO _x | Nitrogen Oxides |
| OM | Organic Material |
| PIMW | Potentially Infectious Medical Wastes |
| PM | Particulate Matter |
| ppm | Parts Per Million |
| PSD | Prevention of Significant Deterioration |
| psia | pounds per square inch absolute |
| scf | standard cubic feet |
| scm | standard cubic meters |
| SIC | Standard Industrial Classification |
| SO ₂ | Sulfur Dioxide |
| TOC | Total Organic Compounds |
| USEPA | United States Environmental Protection Agency |
| VOC | Volatile Organic Compounds |
| VOL | Volatile Organic Liquid |
| VOM | Volatile Organic Material |
| wt. | Weight |
| 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:

Emergency Diesel Generators
Distillate Oil Storage Tanks
Storage Tanks for Chemicals
Printing Operations
Furnaces

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

3.2 Addition of Insignificant Activities

- 3.2.1 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).

- 3.2.2 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.

- 3.2.3 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 | Equipment | Description | Emission Control Equipment |
|---------------|---|--|--|
| Group 1 | Steam Plant (Boilers #1-#4) | Natural Gas-Fired Boilers with Distillate Fuel Oil as Backup | Low NO _x Burners with Control |
| Group 2 | Natural Gas-Fired Boiler | Natural Gas-fired Boilers | None |
| Group 3 | Two Pathological Waste Incinerators (Identical) | Manufacturer: Joseph Goder Model: 21 IN SP | A Secondary Combustion Chamber with Burner is an Integral Part of the Unit |
| Group 4 | Two Ethylene Oxide Sterilizers | Sterilization of Hospital Equipment | None |
| Group 5 | Gasoline Storage Tank | 12,000 Gallon Storage Capacity | Submerged Pipe and Vapor Balance Line |

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_x and SO₂.

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 emissions 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. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, pursuant to 35 IAC 212.310 and 212.312.
- c. Emissions of smoke or other particulate matter from any emission unit shall not exceed 30% opacity, except that opacity of greater than 30% but less than 60% shall be allowed for periods aggregating 8 minutes in any 60 minutes period provided that such more 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 such emission unit owned or operated by the Permittee and provided further that such more opaque emissions permitted from each such emission unit shall be limited to 3 times per 24 hour period pursuant to 35 IAC 212.123(a) and (b).
- d. No person shall cause or allow the emissions of sulfur dioxide into the atmosphere from any process emission unit in excess of 2,000 ppm [35 IAC 214.301].

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

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.3 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) | 6.15 |
| Sulfur Dioxide (SO ₂) | 109.52 |
| Particulate Matter (PM) | 16.91 |
| Nitrogen Oxides (NO _x) | 231.16 |
| HAP, Not Included in VOM or PM | 2.80 |
| Total | 366.43 |

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 Clean Air Act not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per 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

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, or Section 502(b) (10) of the CAA.

5.6 General Recordkeeping Requirements

5.6.1 Emission records

The Permittee shall keep and maintain records of total emissions on a calendar year basis for the equipment covered by unit-specific conditions (Section 7) to demonstrate compliance with Condition 5.5.1.

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 Annual Emissions Report

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

- #### 5.7.2
- The Permittee shall promptly notify the Illinois EPA if the emissions exceed the limits in Condition 5.5.1 and appropriate unit-specific conditions of Section 7.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

None

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Allowable Emissions

Compliance with the source-wide emission limits specified in Condition 5.5.1 shall be based on the recordkeeping and reporting requirements, and Compliance Procedures in Section 7 (Unit-Specific Conditions) of this permit.

6.0 [NOT APPLICABLE TO THIS PERMIT]

7.0 UNIT SPECIFIC CONDITIONS

7.1 Group 1: Steam Plant (Boilers #1 - #4)

7.1.1 Description

Boilers are used to produce steam for heating and air conditioning at the source. The boilers are also able to fire distillate fuel oil, as a backup fuel.

7.1.2 List of Emission Units and Pollution Control Equipment

| Emission Unit | Equipment | Description | Emission Control Equipment |
|---------------|-----------------------------|--|--|
| Group 1 | Steam Plant (Boilers #1-#4) | Natural Gas-Fired Boilers with Distillate Fuel Oil as Backup. Maximum Heat Input Capacity: #1 195.5 MBtu/hr #2 195.5 MBtu/hr #3 195.5 MBtu/hr #4 195.5 MBtu/hr | Low NO _x Burners with Control |

7.1.3 Applicable Regulations

- a. The emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit with actual heat input greater than 2.9 MW (10 MBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].
- b. The emissions of particulate matter (PM) into the atmosphere in any one hour period shall not exceed 0.15 kg/MW-hr (0.10 lb/MBtu) of actual heat input from any fuel combustion emission unit using liquid fuel exclusively [35 IAC 212.206].
- c. The emission of sulfur dioxide (SO₂) into the atmosphere in any one hour period from any existing fuel combustion emission unit, burning liquid fuel exclusively shall not exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lb/MBtu) [35 IAC 214.161(b)].

7.1.4 Non-Applicability of Regulations of Concern

- a. The New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units constructed, reconstructed, or modified after June 9,

1989. Boilers #1 - #4 were constructed prior to June 9, 1989, therefore, these rules do not apply.

- b. Boilers #1 - #4 are not subject to 35 IAC 217.141, emissions of NO_x from existing fuel combustion emission units in major metropolitan areas, because the actual heat input of each boiler is less than 73.2 MW (250 MBtu/hr).
- c. Pursuant to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC 218.301, Use of Organic Material.

7.1.5 Operational and Production Limits and Work Practices

- a. Each boiler shall only be operated with natural gas or distillate fuel oil as the fuels.
- b. The Permittee shall not use distillate fuel oil (Grades No. 1 and 2 fuels) in these boilers with a sulfur content greater than the larger of the following two values:
 - i. 0.28 weight percent, or
 - ii. The Wt percent given by the formula:
Maximum Wt percent sulfur = (0.000015) x (Gross heating value of oil, Btu/lb).

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5.1, the boilers are subject to the following:

None

7.1.7 Testing Requirements

None

7.1.8 Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items which allow to demonstrate compliance with Conditions 5.5.1 and 7.1.5 pursuant to Section 39.5(7)(b) of the Act:

- a. Total natural gas usage for the boilers (ft³/year);

- b. Total distillate fuel oil usage for the boilers (gallons/year);
- c. For each shipment of distillate fuel oil used in the boilers:
 - The maximum sulfur content (wt. %)
- d. Annual aggregate NO_x, PM, SO₂, and VOM emissions from the boilers, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.1.10 Reporting Requirements

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

- a. If there is an exceedance of sulfur content of distillate fuel oil in excess of the limit specified in Condition 7.1.5, the Permittee shall submit a report within 30 days after receipt of noncompliance shipment of distillate fuel oil.
- b. Emissions of NO_x, PM, SO₂, or VOM from the boilers in excess of the limits specified in Condition 5.5.1 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

- a. Compliance with Condition 7.1.3(a) is assumed to be achieved by work-practices inherent in operation of natural gas-fired and distillate oil-fired boilers, so that no compliance procedures are set in this permit addressing this regulation.
- b. Compliance with Condition 7.1.3(c) is assumed to be achieved by the work-practices in operation of distillate oil-fired boilers with a sulfur content meeting the specification of Condition 7.1.5(b), so that no compliance procedures are set in this permit addressing this regulation.
- c. Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

- i. To determine compliance with Condition 5.5.1, emissions from the boilers burning natural gas shall be calculated based on the following emission factors:

| <u>Pollutant</u> | <u>Emission Factor</u> <u>(lb/10⁶ ft³)</u> |
|------------------|---|
| PM | 5 |
| NO _x | 79 |
| SO ₂ | 0.6 |
| VOM | 0.82 |

These are the emission factors for uncontrolled natural gas combustion in Utility/Large Industrial boilers (>100 MBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement F, October, 1996. NO_x emission factor based on controlled low NO_x burners. VOM emission factor based on Total Organic Carbon (TOC) factor corrected for 52% methane.

Boiler Emissions (lb) = natural gas consumed multiplied by the appropriate emission factor.

- ii. To determine compliance with Condition 5.5.1, emissions from the boilers burning distillate fuel oil shall be calculated based on the following emission factors:

| <u>Pollutant</u> | <u>Emission Factors</u> <u>(lb/10³ gallon)</u> |
|------------------|--|
| PM | 2 |
| NO _x | 20 |
| SO ₂ | 142S |
| VOM | 0.34 |

These are the emission factors for uncontrolled distillate fuel oil combustion in commercial/institutional/residential combustors, Tables 1.3-1 and 1.3-2, AP-42, Volume I, Supplement F, October, 1996. "S" indicates that the weight % of sulfur in the oil should be multiplied by the value given.

Boiler Emissions (lb) = distillate fuel oil consumed (gallons) multiplied by the appropriate emission factor.

7.2 Group 2: ATS Building Natural Gas-Fired Boiler

7.2.1 Description

Boiler is used to produce steam for heating and air conditioning at the source.

7.2.2 List of Emission Units and Pollution Control Equipment

| Emission Unit | Equipment | Description | Emission Control Equipment |
|---------------|---------------------|--|----------------------------|
| Group 2 | ATS Building Boiler | Natural Gas-Fired Packaging Boiler. Maximum Heat Input Capacity:6.275 MBtu/hr | None |

7.2.3 Applicable Regulations

The emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit with actual heat input greater than 2.9 MW (10 MBtu/hr) shall not exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

7.2.4 Non-Applicability of Regulations of Concern

- a. The New Source Performance Standard for Small-Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc, applies to units with a heat input more than 10 MBtu/hr and constructed, reconstructed, or modified after June 9, 1989. ATS building boiler is rated at 6.275 MBtu/hr, therefore, these rules do not apply.
- b. The boiler is not subject to 35 IAC 217.141, emissions of NO_x from existing fuel combustion emission units in major metropolitan areas, because the actual heat input of the boiler is less than 73.2 MW (250 MBtu/hr).
- c. Pursuant to 35 IAC 218.303, fuel combustion emission units are not subject to 35 IAC 218.301, Use of Organic Material.

7.2.5 Operational and Production Limits and Work Practices

The boiler 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 limitations in Condition 5.5.1, the boiler is subject to the following:

None

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items which allow to demonstrate compliance with Conditions 5.5.1 and 7.2.5 pursuant to Section 39.5(7)(b) of the Act:

- a. Natural gas usage for the boiler (ft³/yr);
- b. Annual NO_x, PM, SO₂, and VOM emissions from the boiler, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.2.10 Reporting Requirements

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

Emissions of NO_x, PM, SO₂, or VOM from the boiler in excess of the limits specified in Condition 5.5.1 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

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 natural gas-fired boiler, so that no compliance procedures are set in this permit addressing this regulation.

- b. Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

To determine compliance with Condition 5.5.1, emissions from the boiler burning natural gas shall be calculated based on the following emission factors:

| <u>Pollutant</u> | <u>Emission Factor</u> <u>(lb/10⁶ ft³)</u> |
|------------------|---|
| PM | 4.5 |
| NO _x | 100 |
| SO ₂ | 0.6 |
| VOM | 2.8 |

These are the emission factors for uncontrolled natural gas combustion in Commercial Boilers (0.3 - <10 MBtu/hr), Tables 1.4-1, 1.4-2, and 1.4-3, AP-42, Volume I, Supplement F, October, 1996. VOM emission factor based on Total Organic Carbon (TOC) factor corrected for 52% methane.

Boiler Emissions (lb) = natural gas consumed multiplied by the appropriate emission factor.

7.3 Group 3: Pathological Waste Incinerators

7.3.1 Description

Pathological waste incinerators are used for on-site disposal of general and pathological wastes. Each incinerator is of "multiple-chamber" design, with a primary combustion chamber (into which waste is charged) followed by a secondary combustion chamber. Efficient combustion is maintained by natural gas fired supplementary burners installed in each chamber.

7.3.2 List of Emission Units and Pollution Control Equipment

| Emission Unit | Equipment | Description | Emission Control Equipment |
|---------------|---|--|--|
| Group 3 | Pathological Waste Incinerators (2 units) | Manufacturer: Joseph Goder Model: 21 in Sp Charging Capacity: 150 lb/each Construction Dates - 1967 | A Secondary Combustion Chamber with Burner Is an Integral Part of the Unit |

7.3.3 Applicability Provisions and Applicable Regulations

- a. An "affected pathological waste incinerators" for the purpose of these unit specific conditions are two incinerators used for incineration of small animal carcasses, cardboards, wood chips and bedding.
- b. Emissions of PM from any incinerator, for which construction or modification commenced on or after April 14, 1972, shall not exceed 229 mg/scm (0.1 gr/scf) of effluent gases, corrected to 12 percent carbon dioxide [35 IAC 212.181(d)]; and
- c. Emissions of CO from any incinerator shall not exceed 500 ppm, corrected to 50 percent excess air [35 IAC 216.141].

7.3.4 Non-Applicability of Regulations of Concern

Pursuant to 40 CFR 60, Subpart Ce "Emission Guidelines and Compliance Times for Hospital/Medical/Infectious Waste Incinerators", any pathological waste incinerator is not subject to the proposed limitations under this guidelines and to any limitations and control requirements of future state rules applied to the hospital medical waste incinerators.

7.3.5 Operating Requirements and Work Practices

- a. Only animal carcasses, cardboards, wood chips and bedding shall be charged into affected incinerators.
- b. Only general and pathological wastes shall be charged to the incinerators at the rate not exceeding 150 lb/hr for each incinerator, based on measurement of the weight of each load or "charge" of waste introduced into the incinerator.
- c.
 - i. The secondary combustion chamber of each incinerator shall be preheated to the 1400⁰F prior to introducing waste into the incinerator.
 - ii. This temperature shall be maintained until burnout of waste in the primary chamber is completed.
- d. The condition of each 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.

7.3.6 Emission Limitations

In addition to Condition 5.2.2, the source wide limitations in Condition 5.5.1, and limitations in Condition 7.3.3 the incinerators are subject to the following:

N/A

7.3.7 Testing Requirements

N/A

7.3.8 Monitoring Requirements

Each incinerator shall be equipped with a secondary combustion chamber temperature indicator with continuous recorder to allow verification of compliance with requirements of Condition 7.3.5(b).

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain the following records for each incinerator to demonstrate compliance with Conditions 5.5.1 and 7.3.5, 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. Annual aggregate NO_x, PM, and SO₂ emissions from the incinerators, based on the amount of waste charged and the applicable emission factors, with supporting calculations;
- d. Operating logs for each incinerator, which include time of operation, operating temperature of secondary chamber; and
- e. Inspection maintenance logs for each incinerator, with dates of inspection, maintenance, repair, or other actions completed.

7.3.10 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 incinerators were not operated in compliance with requirements of Condition 7.3.5, with date, description and explanation;
- b. Within 90 days for each occurrence when the monitoring system required by Condition 7.3.8 was not in service prior to initially charging waste to an incinerator.

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.3.12 Compliance Procedures

- a. Compliance with Condition 7.3.3(b) and (c) by affected incinerators is assumed to be achieved by compliance with operating requirements and work-practices specified by Condition 7.3.5.
- 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:

To determine compliance with Condition 5.5.1, emissions from affected pathological waste incinerators shall be calculated based on the following emission factors:

| <u>Pollutant</u> | <u>Emission Factor</u> <u>(lb/Ton burned)</u> |
|------------------|--|
| PM | 4.67 |
| NO _x | 3.56 |
| SO ₂ | 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.

Incinerator Emissions (Tons) = waste charged multiplied by the appropriate emission factor.

7.4 Group 4: Ethylene Oxide Sterilizers

7.4.1 Description

These sterilizers are used for sterilization of medical instruments. The unsterilized instruments are placed inside the sterilization chamber, where the ethylene oxide is introduced. Residual ethylene oxide is exhausted to the atmosphere after going through a removal device.

7.4.2 List of Emission Units and Pollution Control Equipment

| Emission Unit | Equipment | Description | Emission Control Equipment |
|---------------|--------------------------------|---|----------------------------|
| Group 4 | Two Ethylene Oxide Sterilizers | Sterilization of Hospital Medical Instruments | None |

7.4.3 Applicable Regulations

None

7.4.4 Non-Applicability of Regulations of Concern

The sterilizers at this source are not subject to requirements of the following:

- a. The ethylene oxide sterilizers at this source are not subject to requirements of 40 CFR Part 63, Subpart Q "National Emission Standards for Hazardous Air Pollutants for Ethylene Oxide Commercial Sterilization and Fumigation Operations", because pursuant to paragraph 40 CFR 63.360(e) all hospitals, doctors offices, clinics are exempted from requirements of these rules;
- b. The ethylene oxide sterilizers at this source are not subject to requirements of 35 IAC Part 218, Subpart G "Use of Organic Material", because pursuant to paragraph 211.7150 chemical compounds used at these units are not photochemical reactive and excluded from definition of VOM.

7.4.5 Operational and Production Limits, and Work Practices

N/A

7.4.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5.1, the sterilizers are subject to the following:

N/A

7.4.7 Testing Requirements

None

7.4.8 Monitoring Requirements

None

7.4.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each sterilizer to demonstrate compliance with Condition 5.5.1:

- a. The composition of each sterilant mixture used, i.e., weight ETO, wt. VOM, wt. non-VOM;
- b. Amount of each type of the sterilant used;
- c. Amount of ETO emitted.

7.4.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of noncompliance with the control, operating requirements, and emissions of HAPs as follows pursuant to Section 39.5(7)(f)(ii) of the Act:

- a. The annual emissions of individual HAPs for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total of Condition 5.5.2, tons/year (e.g., for the month of January, the emissions from February of the preceding year through January, for the month of February, the emissions from March of the preceding calendar year through February, 12 months in all); and
- b. The total emissions of all HAPs combined for each month of the previous calendar year sufficient to demonstrate compliance with the 12 month running total of Condition 5.5.2, tons/year (e.g., for the month of January, the emissions from February of the preceding year through January, for the month of February, the emissions from March of the preceding calendar year through February, 12 months in all).

7.4.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.4.12 Compliance Procedures

To determine compliance with Conditions 5.5.1 emissions from the sterilizers shall be calculated based on the following:

Sterilizer HAP Emissions = Sterilant ETO Consumption

7.5 Group 5: Gasoline Storage Tank

7.5.1 Description

The gasoline storage tank is associated with gasoline non-retail dispensing operations for university vehicles.

7.5.2 List of Emission Units and Pollution Control Equipment

| Emission Unit | Equipment | Description | Emission Control Equipment |
|---------------|-----------------------|---|---------------------------------------|
| Group 5 | Gasoline Storage Tank | 12,000 Gallon Capacity. Used for Gasoline Dispensing Operations | Submerged Pipe and Vapor Balance Line |

7.5.3 Applicable Regulations

- a. No person shall cause or allow the loading of any organic material in any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe [35 IAC 218.122(b)];
- b. Pursuant to 35 IAC 218.583(a), the transfer of gasoline from any delivery vessel into the stationary storage tank at a gasoline dispensing operations shall include the following:
 - i. The tank is equipped with a submerged loading pipe; and
 - ii. The vapors displaced from the storage tank during filling and processed by a vapor control system that includes one or more of the following:
 - A. A vapor collection system that meets the requirements of 218.583(d)(4); or
 - B. A refrigeration-condensation system or any other system approved by the Illinois EPA and approved by the USEPA as a SIP revision, that recovers at least 90 percent by weight of all vaporized organic material from the equipment being controlled; and
 - C. The delivery vessel displays the appropriate sticker pursuant to the requirements of Section 218.584(b) or (d); and

- iii. All tank vent pipes are equipped with pressure/vacuum relief valves and shall be set to resist a pressure of at least 3.5 inches water column and to resist a vacuum of no less than 6.0 inches water column.

7.5.4 Non-Applicability of Regulations of Concern

- a. The gasoline storage tank is not subject to the requirements of 35 IAC 218.120, because this tank meets the following criteria pursuant to 35 IAC 218.119:

Does not have 151 cubic meters (40,000 gal) capacity.

- b. The gasoline storage tank is not subject to the requirements of 35 IAC 218.121(b), because this tank meets the following criteria pursuant to 35 IAC 218.121:

Does not have 151 cubic meters (40,000 gal) capacity.

- c. The gasoline storage tank is not subject to the limitation of 35 IAC 218.122(a), because this tank meets the following criteria pursuant to 35 IAC 218.122(a):

Does not have throughput of greater than 151 cubic meters per day (40,000 gal/day).

- d. The gasoline storage tank is not subject to the requirements of 35 IAC 218.586(c), because this tank meets the following criteria pursuant to 35 IAC 218.586(b):

An average monthly volume of motor vehicle fuel dispensed is less than 10,000 gal/month.

7.5.5 Compliance Plan/Schedule of Compliance

N/A

7.5.6 Operational and Production Limits, and Work Practices

Pursuant to 218.583(d), the Permittee shall:

- a. Maintain and operate each vapor control system in accordance with the owner's instructions;
- b. Promptly notify the owner of any scheduled maintenance or malfunction requiring replacement or repair of a major component of a vapor control system;

- c. Maintain gauges, meters or other specified testing devices in proper working order;
- d. Operate the vapor collection system and delivery vessel unloading points in a manner that prevents:
 - i. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B incorporated by reference in Section 218.112 of this Part; and
 - ii. Avoidable leaks of liquid during the filling of storage tanks.
- e. Within 15 business days after discovery of the leak by the owner, operator, or the Illinois EPA, repair and retest a vapor collection system which exceeds the limits of Condition 7.5.6(d)(i).

7.5.7 Emission Limitations

In addition to Condition 5.2.2 and the source wide limitations in Condition 5.5.1 the gasoline storage tank is subject to the following:

N/A

7.5.8 Testing Requirements

Pursuant to 218.583(a)(4), the Permittee shall demonstrate compliance with subsection 218.583(a)(3) after installation of each pressure/vacuum relief valve, and at least annually thereafter, by measuring and recording the pressure indicated by a pressure/vacuum gauge at each tank vent pipe. The test shall be performed on each tank vent pipe within two hours after product delivery into the respective storage tank. For manifold tank vent systems, observations at any point within the system shall be adequate. The Permittee shall maintain any records required by this subsection for a period of three years.

7.5.9 Monitoring Requirements

Pursuant to 218.583(c), the Permittee shall:

- a. Install all control systems and make all process modifications required by 218.583(a);
- b. Provide instructions to the operator of the gasoline dispensing operation describing necessary maintenance operations and procedures for prompt notification of

the owner in case of any malfunction of a vapor control system; and

- c. Repair, replace or modify any worn out or malfunctioning component or element of design.

7.5.10 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the storage tank to demonstrate compliance with Condition 5.5.1 and Condition 7.5.4(a) pursuant to Section 39.5(7)(b) of the Act and 35 IAC 218.129(f):

- a. Readily accessible records of dimensions and analysis of the capacity of the storage tank; and
- b. Monthly and annual gasoline throughput (gallons/month and gallons/year).

7.5.11 Reporting Requirements

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

- a. Emissions of VOM from the storage tank in excess of the limits specified in Condition 5.5.1 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence;

7.5.12 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.5.13 Compliance Procedures

To determine compliance with Conditions 5.5.1 emissions from the storage tank shall be calculated based on the following:

For the purpose of calculating VOM emissions from the storage tank, the current version of the TANKS program is acceptable.

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 as of the date the proposed permit for this source was issued. This shield is granted based on the Illinois EPA's review of the permit application for this source and its determination that all applicable requirements are specifically identified in this permit. If the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to the source, the Illinois EPA's written determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after May 9, 1997 (the date of issuance of the draft permit) unless the 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, or 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 without applying for or obtaining an amendment to this permit, provided that the changes do not constitute a modification under Title I of the CAA, emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change and 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:

- a. Describe the physical or operational change;
- b. Identify the schedule for implementing the physical or operational change;
- c. 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;
- d. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
- e. 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 process, emissions, or composition 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

A report summarizing required monitoring 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 such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in the 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 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 on an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in the 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:

- 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
Division of Air Pollution Control
Compliance Section (#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 (MC 11)

Illinois Environmental Protection Agency
Divisions of Air Pollution Control
Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506
 - iv. USEPA - Air Branch

United States EPA (AE - 18J)
Air & Radiation Branch (Illinois - Indiana)
77 W. 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.

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 the 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 Clean Air Act, 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 Clean Air Act; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the Clean Air Act.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of the permit. Any permit noncompliance constitutes a violation of the Clean Air Act 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 Environmental Protection 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)] 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)(p)(ii) of Act]:

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

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

The permit does not convey any property rights of any sort, or any exclusive privilege.

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.

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 the 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 compliance certifications annually or more frequently as specified in the applicable requirement or by permit condition.

- a. The certifications shall include descriptions on means to monitor the compliance of the source including emissions limitations, standards, and work practices in accordance with applicable requirements and permit conditions. The certification shall include the identification of each term or condition of the 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 must 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 a CAAPP permit shall contain certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(k) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defenses to Enforcement Action

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 operation logs, or other relevant evidence:
 - i. An emergency occurred as provided in Subsection 7(k) of Section 39.5 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 day 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 the permit.

b. This provision is in addition to any emergency or upset provisions 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 the 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 the permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

The 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

The 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 the permit contains a material mistake or inaccurate statement when establishing the emission standards or

limitations, or other terms or conditions of the permit; and

- d. The Illinois EPA or USEPA determines that the 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)(a)(iii) 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 the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by the 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 the 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) and (n) of the Act]

10.0 ATTACHMENTS

10.1 Attachment 1 - Example Certification by a Responsible Official

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

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

DES:AB:psj

10.2 Attachment 2 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

| | |
|---|----------------------------------|
| Application For Construction Permit (For CAAPP Sources Only) | For Illinois EPA use only |
| | ID 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.

| Source Information | | |
|---|--------------|---------------|
| 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. ID number: |

| Owner Information | | |
|--------------------------|------------|---------------|
| 9. Name: | | |
| 10. Address: | | |
| 11. City: | 12. State: | 13. Zip code: |

| Operator Information (if different from owner) | | |
|---|------------|---------------|
| 14. Name | | |
| 15. Address: | | |
| 16. City: | 17. State: | 18. Zip code: |

| Applicant Information | |
|---|--|
| 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.

10.3 Attachment 3 - Form 199-CAAPP, Application For Construction Permit (For CAAPP Sources Only)



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

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.

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199-CAAPP

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| Summary Of Application Contents | |
|--|--|
| 24. | <p>Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs:</p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> |
| 25. | <p>Does the application identify and address all applicable emissions standards, including those found in the following:</p> <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> |
| 26. | <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> |
| 27. | <p>Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?</p> <p style="text-align: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> |
| 28. | <p>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?</p> <p>Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.</p> <p style="text-align: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> |
| 29. | <p>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?</p> <p style="text-align: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="text-align: right;"><input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application</p> |

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

| Signature Block | |
|---|--|
| <p>This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.</p> | |
| 30. | <p>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.</p> <p>Authorized Signature:</p> <p>BY: _____</p> <p style="text-align: center;">AUTHORIZED SIGNATURE</p> <p style="text-align: center;">TYPED OR PRINTED NAME OF SIGNATORY</p> <p style="text-align: right;">_____</p> <p style="text-align: right;">TITLE OF SIGNATORY</p> <p style="text-align: right;">_____/_____/_____</p> <p style="text-align: right;">DATE</p> |

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.

10.4 Attachment 4 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 form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
2. A completed compliance certification for the source. For this purpose, the Illinois EPA will accept a copy of the most recent form 401-CAAPP, ANNUAL COMPLIANCE CERTIFICATION submitted to the Illinois EPA.
3. 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.
4. Information addressing any outstanding transfer agreement pursuant to the ERMS.
5.
 - 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. 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.

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