

217/782-2113

RENEWAL  
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Brookfield Zoo  
Attn: Amy Shoenfeld Lofgren  
3300 South Golf Road  
Brookfield, Illinois 60513

I.D. No.: 031033AAK  
Application No.: 09100011

Date Received: October 7, 2009  
Date Issued: TBD  
Expiration Date<sup>1</sup>: TBD

Operation of: Brookfield Zoo  
Source Location: 3300 South Golf Road, Brookfield, Cook County, 60513  
Responsible Official: Randal E. Gross, Maintenance Manager

This permit is hereby granted to the above-designated Permittee to OPERATE Brookfield Zoo, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

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

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

ECB:MTR:JRC:psj

cc: Illinois EPA, FOS, Region 1  
CES  
Lotus Notes

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

TABLE OF CONTENTS

|  | <u>Page</u> |
|--|-------------|
| <b>1.0 INTRODUCTION</b>  | 4           |
| 1.1 Source Identification  |             |
| 1.2 Owner/Parent Company   |             |
| 1.3 Operator   |             |
| 1.4 Source Description   |             |
| 1.5 Title I Conditions   |             |
| <b>2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED</b>              | 5           |
| <b>3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES</b>                       | 6           |
| 3.1 Identification of Insignificant Activities                           |             |
| 3.2 Compliance with Applicable Requirements                              |             |
| 3.3 Addition of Insignificant Activities                                 |             |
| <b>4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE</b>                     | 8           |
| <b>5.0 OVERALL SOURCE CONDITIONS</b>                                     | 9           |
| 5.1 Applicability of Clean Air Act Permit Program (CAAPP)                |             |
| 5.2 Area Designation   |             |
| 5.3 Source-Wide Applicable Provisions and Regulations                    |             |
| 5.4 Source-Wide Non-Applicability of Regulations of Concern              |             |
| 5.5 Source-Wide Control Requirements and Work Practices                  |             |
| 5.6 Source-Wide Production and Emission Limitations                      |             |
| 5.7 Source-Wide Testing Requirements                                     |             |
| 5.8 Source-Wide Monitoring Requirements                                  |             |
| 5.9 Source-Wide Recordkeeping Requirements                               |             |
| 5.10 Source-Wide Reporting Requirements                                  |             |
| 5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios |             |
| 5.12 Source-Wide Compliance Procedures                                   |             |
| <b>6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS</b>                     | 14          |
| 6.1 Emissions Reduction Market System (ERMS)                             |             |
| <b>7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS</b>          | 16          |
| 7.1 Diesel Engine  |             |
| 7.2 Natural Gas Cogeneration Engines                                     |             |
| <b>8.0 GENERAL PERMIT CONDITIONS</b>                                     | 26          |
| 8.1 Permit Shield  |             |
| 8.2 Applicability of Title IV Requirements                               |             |
| 8.3 Emissions Trading Programs   |             |

|             | <u>Page</u>   |     |
|-------------|---|-----|
| 8.4         | Operational Flexibility/Anticipated Operating Scenarios       |     |
| 8.5         | Testing Procedures  |     |
| 8.6         | Reporting Requirements  |     |
| 8.7         | Title I Conditions  |     |
| <b>9.0</b>  | <b>STANDARD PERMIT CONDITIONS</b>                             | 31  |
| 9.1         | Effect of Permit  |     |
| 9.2         | General Obligations of Permittee                              |     |
| 9.3         | Obligation to Allow Illinois EPA Surveillance                 |     |
| 9.4         | Obligation to Comply with Other Requirements                  |     |
| 9.5         | Liability   |     |
| 9.6         | Recordkeeping   |     |
| 9.7         | Annual Emissions Report                                       |     |
| 9.8         | Requirements for Compliance Certification                     |     |
| 9.9         | Certification   |     |
| 9.10        | Defense to Enforcement Actions                                |     |
| 9.11        | Permanent Shutdown  |     |
| 9.12        | Reopening and Reissuing Permit for Cause                      |     |
| 9.13        | Severability Clause   |     |
| 9.14        | Permit Expiration and Renewal                                 |     |
| 9.15        | General Authority for the Terms and Conditions of this Permit |     |
| <b>10.0</b> | <b>ATTACHMENTS</b>  |     |
| 1           | Example Certification by a Responsible Official               | 1-1 |
| 2           | Emissions of Particulate Matter from Process Emission Units   | 2-1 |
| 3           | Guidance  | 3-1 |

1.0 INTRODUCTION

1.1 Source Identification

Brookfield Zoo  
3300 South Golf Road  
Brookfield, Illinois 60513  
708/688-8531

I.D. No.: 031033AAK  
County: Cook  
Standard Industrial Classification: 8422, Zoo and Botanical Garden

1.2 Owner/Parent Company

Chicago Zoological Society  
3300 South Golf Road  
Brookfield, Illinois 60513

1.3 Operator

Forest Preserve District of Cook County  
536 North Harlem Avenue  
River Forest, Illinois 60305

Amy Schoenfeld Lofgren  
708/688-8531

1.4 Source Description

The source operates a diesel oil fired engine and natural gas fired engines for on-site electrical generation and steam production.

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

1.5 Title I Conditions

As generally identified below, this CAAPP permit contains certain conditions for emission units at this source that address the applicability of permitting programs for the construction and modification of sources, which programs were established pursuant to Title I of the Clean Air Act (CAA) and regulations thereunder. These programs include PSD and MSSCAM, and are implemented by the Illinois EPA pursuant to Sections 9, 9.1, 39(a) and 39.5(7)(a) of the Illinois Environmental Protection Act (Act). These conditions continue in effect, notwithstanding the expiration date specified on the first page of this permit, as their authority derives from Titles I and V of the CAA, as well as Titles II and X of the Act. (See also Condition 8.7.)

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

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

|                   |  |
|-------------------|--|
| ACMA              | Alternative Compliance Market Account  |
| Act               | Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]   |
| AP-42             | Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711 |
| ATU               | Allotment Trading Unit   |
| BACT              | Best Available Control Technology  |
| BAT               | Best Available Technology  |
| CAA               | Clean Air Act [42 U.S.C. Section 7401 et seq.]   |
| CAAPP             | Clean Air Act Permit Program   |
| CAM               | Compliance Assurance Monitoring  |
| CEMS              | Continuous Emission Monitoring System  |
| CFR               | Code of Federal Regulations  |
| CO                | Carbon Monoxide  |
| ERMS              | Emissions Reduction Market System  |
| HAP               | Hazardous Air Pollutant  |
| IAC               | Illinois Administrative Code   |
| I.D. No.          | Identification Number of Source, assigned by Illinois EPA  |
| ILCS              | Illinois Compiled Statutes   |
| Illinois EPA      | Illinois Environmental Protection Agency   |
| LAER              | Lowest Achievable Emission Rate  |
| MACT              | Maximum Achievable Control Technology  |
| MSSCAM            | Major Stationary Sources Construction and Modification (35 IAC 203, New Source Review for non-attainment areas)  |
| NESHAP            | National Emission Standards for Hazardous Air Pollutants   |
| NO <sub>x</sub>   | Nitrogen Oxides  |
| 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  |
| PM <sub>2.5</sub> | Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods   |
| PSD               | Prevention of Significant Deterioration (40 CFR 52.21, New Source Review for attainment areas)   |
| RMP               | Risk Management Plan   |
| SO <sub>2</sub>   | Sulfur Dioxide   |
| T1                | Title I - identifies Title I conditions that have been carried over from an existing permit  |
| T1N               | Title I New - identifies Title I conditions that are being established in this permit  |
| T1R               | Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit  |
| USEPA             | United States Environmental Protection Agency  |
| VOM               | Volatile Organic Material  |

### 3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

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

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

None

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

None

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

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

Storage tanks of any size containing virgin or re-refined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Gas turbines and stationary reciprocating internal combustion engines of less than 112 kW (150 horsepower) power output [35 IAC 201.210(a)(15)].

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

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

#### 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.3.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission

limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.2 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 218.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

### 3.3 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 |
|-------------------------------|---|------------------|----------------------------|
| Stand-by Generator Unit No. 1 | 5.46 mmBtu/hr Diesel Oil No. 2 Combustion Engine (1,600 KW) | Pre-2005         | None                       |
| Cogeneration Unit No. 2       | 3.81 mmBtu/hr Natural Gas Spark Ignited Engine (892 KW)     | Pre-2005         | None                       |
| Cogeneration Unit No. 3       | 3.81 mmBtu/hr Natural Gas Spark Ignited Engine (892 KW)     | Pre-2005         | None                       |
| Cogeneration Unit No. 4       | 5.09 mmBtu/hr Natural Gas Spark Ignited Engine (1,490 KW)   | 2007             | None                       |

## 5.0 OVERALL SOURCE CONDITIONS

### 5.1 Applicability of Clean Air Act Permit Program (CAAPP)

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of NO<sub>x</sub> emissions.

### 5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated nonattainment for the National Ambient Air Quality Standards for ozone (moderate nonattainment) and attainment or unclassifiable for all other criteria pollutants (CO, lead, NO<sub>2</sub>, ozone, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>).

### 5.3 Source-Wide Applicable Provisions and Regulations

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

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

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

#### 5.3.3 Ozone Depleting Substances

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

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

#### 5.3.4 Risk Management Plan (RMP)

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

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

#### 5.3.5 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).
- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

#### 5.4 Source-Wide Non-Applicability of Regulations of Concern

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

#### 5.5 Source-Wide Control Requirements and Work Practices

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

## 5.6 Source-Wide Production and Emission Limitations

### 5.6.1 Permitted Emissions for Fees

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

#### Permitted Emissions of Regulated Pollutants

| Pollutant                          | Tons/Year |
|------------------------------------|-----------|
| Volatile Organic Material (VOM)    | 27.22     |
| Sulfur Dioxide (SO <sub>2</sub> )  | 1.22      |
| Particulate Matter (PM)            | 0.42      |
| Nitrogen Oxides (NO <sub>x</sub> ) | 49.70     |
| HAP, not included in VOM or PM     | ---       |
| Total                              | 78.56     |

### 5.6.2 Emissions of Hazardous Air Pollutants

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

### 5.6.3 Other Source-Wide Production and Emission Limitations

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

## 5.7 Source-Wide Testing Requirements

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

- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field

of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests [35 IAC 201.282(a)].

- b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary [35 IAC 201.282(b)].
- c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

#### 5.8 Source-Wide Monitoring Requirements

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

#### 5.9 Source-Wide Recordkeeping Requirements

##### 5.9.1 Annual Emission Records

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

##### 5.9.2 Records for HAP Emissions

The Permittee shall maintain records of individual and combined HAP emissions on a potential to emit basis for the emission units covered by Section 7 (Unit Specific Conditions for Specific Emission Units) of this permit to demonstrate compliance with Condition 5.6.2, pursuant to Section 39.5(7)(b) of the Act.

##### 5.9.3 Retention and Availability of Records

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

Illinois EPA or USEPA request for records during the course of a source inspection.

5.10 Source-Wide Reporting Requirements

5.10.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the source with the permit requirements within 30 days, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. There are also reporting requirements for unit specific emission units set forth in Section 7 of this permit.

5.10.2 Annual Emissions Report

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

5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

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

5.12 Source-Wide Compliance Procedures

5.12.1 Procedures for Calculating Emissions

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

## 6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

### 6.1 Emissions Reduction Market System (ERMS)

#### 6.1.1 Description of ERMS

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

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

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

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

#### 6.1.2 Applicability

This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 IAC Part 205, pursuant to 35 IAC 205.200. This is based on the source's actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year

being less than 10 tons and the source's baseline emissions also being less than 10 tons.

#### 6.1.3 Recordkeeping and Reporting

- a. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:
  - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
  - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and
  - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.
- b. In the event that the source's VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in its CAAPP permit.

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Diesel Engine

7.1.1 Description

A diesel oil fired engine for on-site electrical generation.

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

7.1.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit                 | Description   | Date Constructed | Emission Control Equipment |
|-------------------------------|---|------------------|----------------------------|
| Stand-by Generator Unit No. 1 | 5.46 mmBtu/hr Diesel Oil No. 2 Combustion Engine (1,600 KW) | Pre-2005         | None                       |

7.1.3 Applicable Provisions and Regulations

- a. The "affected engine" for the purpose of these unit-specific conditions, is the process emission unit described in Conditions 7.1.1 and 7.1.2.
- b.
  - i. The affected engine is subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines 40 CFR Part 63, Subpart ZZZZ, because the affected engine is a stationary RICE at an area source of HAP emissions, pursuant to 40 CFR 63.6580.
  - ii. Pursuant to 40 CFR 63.6590(a)(1)(iii), the affected engine is an existing stationary RICE located at an area source of HAP emissions because the affected engine commenced construction before June 12, 2006 and the source is not a major source of HAP emissions pursuant to Condition 5.6.2.
  - iii. Pursuant to 40 CFR 63.6590(b)(3), existing compression ignition (CI) stationary RICE do not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ or Subpart A. No initial notification is necessary.
- c. Pursuant to 35 IAC 212.123, 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. The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 1000 ft radius from

the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

- d. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.
- e. Pursuant to 35 IAC 214.304, the emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with applicable 35 IAC 214 Subparts B through F. Therefore, pursuant to 35 IAC 214 Subpart B Section 214.121(b), no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion emission source (process emission source), burning liquid fuel exclusively to exceed 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).
- f. No person shall cause or allow the discharge of more than 8.0 lbs/hr of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitations of this Condition shall apply only to photochemically reactive material [35 IAC 218.301].

#### 7.1.4 Non-Applicability of Regulations of Concern

- a. The affected engine is not subject to the New Source Performance Standards (NSPS) for Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII, because the Permittee did not commence construction (date the engine is ordered by the Permittee) of the affected engine after July 11, 2005, the units were manufactured on or before April 1, 2006, and did not modify or reconstruct the affected engines after July 11, 2005, pursuant to 40 CFR 60.4200(a)(2) and 60.4200(a)(3).
- b. The affected engine is not subject to 35 IAC 212.321 or 212.322, due to the unique nature of such units, a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.
- c. The affected engine is not subject to 35 IAC 216.121 because the affected engine is not a fuel combustion unit, as defined by 35 IAC 211.2470.
- d. The affected engine is not subject to 35 IAC 217.141 because the affected engine is not a fuel combustion unit, as defined by 35 IAC 211.2470.
- e. The affected engine is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected engine does not use an add-on

control device to achieve compliance with an emission limitation or standard.

7.1.5 Control Requirements and Work Practices

- a. Distillate fuel oil shall be the only fuels fired in the affected engine [T1 - 96030221].

7.1.6 Production and Emission Limitations

- a. Operating hours of the affected engine shall not exceed 500 hr/year. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1 - 96030221].
- b. Emissions from the affected engine shall not exceed the following limits. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1 - 96030221].

| <u>Pollutant</u> | <u>Emissions</u> |                  |
|------------------|------------------|------------------|
|                  | <u>(lbs/hr)</u>  | <u>(tons/yr)</u> |
| NO <sub>x</sub>  | 48.9             | 12.23            |
| CO               | 32.8             | 8.2              |

- c. The above limitations were established in Permit 96030221, pursuant to PSD and 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD and 35 IAC Part 203 [T1].

7.1.7 Testing Requirements

Testing requirements are not set for the affected engine.

7.1.8 Monitoring Requirements

- a. Pursuant to Section 39.5(7)(a) of the Act, the source shall perform the following monitoring requirements for the affected engine:
  - i. Sample for sulfur content (wt. %) in each shipment of distillate fuel oil; or
  - ii. Obtain supplier certification for sulfur content (wt. %) in each shipment of distillate fuel oil.

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected engine to demonstrate compliance with Conditions 5.6.1,

7.1.3, 7.1.5, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. i. Keep a maintenance and repair log, listing significant activities performed with date.
- ii. Maintain records of the vendor recommendations.
- b. Monthly and annual operating hours.
- c. i. Type of fuel used if other than distillate fuel oil.
- ii. Sulfur content (wt. %) in each shipment of distillate fuel oil.
- d. Maximum hourly emissions of NO<sub>x</sub>, CO, SO<sub>2</sub>, and VOM with supporting calculations.
- e. Monthly and annual emissions of NO<sub>x</sub> and CO with supporting calculations

7.1.10 Reporting Requirements

a. Reporting of Deviations

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

- i. Emissions from the affected engine in excess of the limits specified in Conditions 7.1.3 and 7.1.6 within 30 days of such occurrence.
- ii. Operation of the affected engine in excess of the limits specified in Conditions 7.1.5 and 7.1.6 within 30 days of such occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected engine.

7.1.12 Compliance Procedures

- a. Compliance with Condition 7.1.3(c) is addressed by the testing requirements in Condition 5.7 and the records required in Conditions 7.1.9(a).
- b. Compliance with Conditions 7.1.3(d) and (e) is addressed by the monitoring requirements in Condition 7.1.8(a) and the records required in Condition 7.1.9(c) and (d).
- c. Compliance with Condition 7.1.3(f) is addressed by the records required in Conditions 7.1.9(a) and (d).

- d. Compliance with Condition 7.1.5(a) is addressed by the records required in Condition 7.1.9(c).
- e. Compliance with Condition 7.1.6(a) is addressed by the records required in Condition 7.1.9(b).
- f. Compliance with Conditions 7.1.6(b) is addressed by the records required in Conditions 7.1.9(a), (d), and (e).

## 7.2 Natural Gas Cogeneration Engines

### 7.2.1 Description

Natural gas fired engines for on-site electrical generation and steam production.

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

### 7.2.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit           | Description   | Date Constructed | Emission Control Equipment |
|-------------------------|---|------------------|----------------------------|
| Cogeneration Unit No. 2 | 3.81 mmBtu/hr Natural Gas Spark Ignited Engine (892 KW)   | Pre-2005         | None                       |
| Cogeneration Unit No. 3 | 3.81 mmBtu/hr Natural Gas Spark Ignited Engine (892 KW)   | Pre-2005         | None                       |
| Cogeneration Unit No. 4 | 5.09 mmBtu/hr Natural Gas Spark Ignited Engine (1,490 KW) | 2007             | None                       |

### 7.2.3 Applicable Provisions and Regulations

- a. The "affected engines" for the purpose of these unit-specific conditions, are the process emission units described in Conditions 7.2.1 and 7.2.2.
- b.
  - i. The affected engine is subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines 40 CFR Part 63, Subpart ZZZZ, because the affected engine is a stationary RICE at an area source of HAP emissions, pursuant to 40 CFR 63.6580.
    - ii.
      - A. Pursuant to 40 CFR 63.6590(a)(2)(iii), affected engine #4 is a new stationary RICE located at an area source of HAP emissions because the affected engine commenced construction on or after June 12, 2006 and the source is not a major source of HAP emissions pursuant to Condition 5.6.2.
      - B. Pursuant to 40 CFR 63.6590(c), new stationary RICE located at an area source are subject to 40 CFR Part 60 Subpart JJJJ, for spark ignition engines.
    - iii.
      - A. Pursuant to 40 CFR 63.6590(a)(1)(iii), affected engines #2 and #3 are existing stationary RICE located at an area source of HAP emissions because the affected engines commenced construction before June 12, 2006 and the source

is not a major source of HAP emissions pursuant to Condition 5.6.2.

- B. Pursuant to 40 CFR 63.6590(b)(3), existing compression ignition (CI) stationary RICE do not have to meet the requirements of 40 CFR Part 63, Subpart ZZZZ or Subpart A. No initial notification is necessary.
- c. Pursuant to 35 IAC 212.123, 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. The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 1000 ft radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- d. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.
- e. No person shall cause or allow the discharge of more than 8.0 lbs/hr of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitations of this Condition shall apply only to photochemically reactive material. [35 IAC 218.301]

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

- a. The affected engines are not subject to 35 IAC 212.321 or 212.322, due to the unique nature of such units, a process weight rate cannot be set so that such rules cannot reasonably be applied, pursuant to 35 IAC 212.323.
- c. The affected engines are not subject to 35 IAC 216.121 because the affected engines are not fuel combustion units, as defined by 35 IAC 211.2470.
- d. The affected engine is not subject to 35 IAC 217.141 because the affected engines are not fuel combustion units, as defined by 35 IAC 211.2470.
- e. The affected engines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected engines do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 Control Requirements and Work Practices

- a. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate affected engine #4 including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions [40 CFR 60.11(d)].
- b. Natural gas shall be the only fuels fired in the affected engines [T1 - 06090067].

7.2.6 Production and Emission Limitations

- a. Operating hours of affected engine #4 shall not exceed 600 hr/month and 3,600 hr/year. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1 - 06090067].
- b. Emissions from the affected engines shall not exceed the following limits. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1 - 06090067].

| <u>Pollutant</u> | <u>Emissions</u><br><u>(lbs/hr)</u> | <u>(tons/yr)</u> |
|------------------|-------------------------------------|------------------|
| NO <sub>x</sub>  | 2.6                                 | 12.5             |
| CO               | 4.6                                 | 22.1             |
| VOM              | 1.7                                 | 8.4              |

- c. The above limitations were established in Permit 06090067, pursuant to PSD and 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD and 35 IAC Part 203 [T1].

7.2.7 Testing Requirements

Testing requirements are not set for the affected engines.

7.2.8 Monitoring Requirements

Monitoring requirements are not set for the affected engines.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected engines to demonstrate compliance with Conditions 5.6.1 7.2.3, 7.2.5, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

- a. i. Keep a maintenance and repair log, listing significant activities performed with date.
- ii. Maintain records of the vendor recommendations.
- b. Have on file the model year and any significant modification dates.
- c. Monthly and annual operating hours.
- d. Type of fuel used if other than natural gas.
- e. Maximum hourly emissions of SO<sub>2</sub> and VOM with supporting calculations.
- f. Monthly and annual emissions of NO<sub>x</sub>, CO, and VOM with supporting calculations

7.2.10 Reporting Requirements

- a. Reporting of Deviations

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

- i. Emissions from the affected engines in excess of the limits specified in Conditions 7.2.3 and 7.2.6 within 30 days of such occurrence.
- ii. Operation of the affected engines in excess of the limits specified in Conditions 7.2.5 and 7.2.6 within 30 days of such occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected engines.

7.2.12 Compliance Procedures

- a. Compliance with Condition 7.2.3(c) is addressed by the testing requirements in Condition 5.7 and the records required in Conditions 7.2.9(a).
- b. Compliance with Conditions 7.2.3(d) and (e) is addressed by the records required in Conditions 7.2.9(a) and (e).
- c. Compliance with Condition 7.2.5(a) is addressed by the records required in Condition 7.2.9(a).
- d. Compliance with Condition 7.2.5(c) is addressed by the records required in Condition 7.2.9(d).

- e. Compliance with Condition 7.2.5(a) is addressed by the records required in Condition 7.2.9(c).
- f. Compliance with Condition 7.2.5(b) is addressed by the records required in Condition 7.2.9(f).

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

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

This permit shield does not extend to applicable requirements which are promulgated after \_\_\_\_\_ (the date of issuance of the proposed permit) unless this permit has been modified to reflect such new requirements.

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

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

### 8.3 Emissions Trading Programs

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

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

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

#### 8.4.2 Changes Requiring Prior Notification

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

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

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

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA every six months as follows, unless more frequent submittal of such reports is required in Sections 5 or 7 of this permit [Section 39.5(7)(f) of the Act]:

| <u>Monitoring Period</u> | <u>Report Due Date</u> |
|--------------------------|------------------------|
| January - June           | September 1            |

Monitoring Period

Report Due Date

July - December

March 1

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

8.6.2 Test Notifications

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

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

8.6.3 Test Reports

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

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;

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

#### 8.6.4 Reporting Addresses

- a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.
- b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:
  - i. Illinois EPA - Air Compliance Unit
 

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

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

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016
  - iv. USEPA Region 5 - Air Branch
 

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

- c. Permit applications should be addressed to the Air Permit Section. As of the date of issuance of this permit, the address of the Air Permit Section is as follows:

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

8.7 Title I Conditions

Notwithstanding the expiration date on the first page of this CAAPP permit, Title I conditions in this permit, which are identified by a T1, T1N, or T1R designation, remain in effect until such time as the Illinois EPA takes action to revise or terminate them in accordance with applicable procedures for action on Title I conditions. This is because these conditions either: (a) incorporate conditions of earlier permits that were issued by the Illinois EPA pursuant to authority that includes authority found in Title I of the CAA (T1 conditions), (b) were newly established in this CAAPP permit pursuant to authority that includes such Title I authority (T1N conditions), or (c) reflect a revision or combination of conditions established in this CAAPP permit (T1R conditions). (See also Condition 1.5.)

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

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

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

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

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, pursuant to Section 39.5(7)(j) and (p) of the Act, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

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

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

#### 9.2.2 Duty to Maintain Equipment

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

#### 9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless this permit provides for such continued operation consistent with the Act and applicable Illinois Pollution Control Board regulations [Section 39.5(6)(c) of the Act].

#### 9.2.4 Disposal Operations

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

#### 9.2.5 Duty to Pay Fees

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

### 9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents as may be required by law and in accordance with constitutional limitations, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Sections 4 and 39.5(7)(a) and (p)(ii) of the Act]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor any substances or parameters at any location:
  - i. At reasonable times, for the purposes of assuring permit compliance or applicable requirements; or
  - ii. As otherwise authorized by the CAA, or the Act.

- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any regulated activity, discharge or emission at the source authorized by this permit.

#### 9.4 Obligation to Comply with Other Requirements

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

#### 9.5 Liability

##### 9.5.1 Title

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

##### 9.5.2 Liability of Permittee

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

##### 9.5.3 Structural Stability

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

##### 9.5.4 Illinois EPA Liability

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

##### 9.5.5 Property Rights

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

#### 9.6 Recordkeeping

##### 9.6.1 Control Equipment Maintenance Records

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

##### 9.6.2 Records of Changes in Operation

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

#### 9.6.3 Retention of Records

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

#### 9.7 Annual Emissions Report

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

#### 9.8 Requirements for Compliance Certification

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

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

#### 9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee

that meets the requirements of Section 39.5(5) of the Act and applicable regulations [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as Attachment 1 to this permit.

#### 9.10 Defense to Enforcement Actions

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

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

##### 9.10.2 Emergency Provision

a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence [Section 39.5(7)(k) of the Act]:

i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Note: For this purpose, emergency means a situation arising from sudden and reasonably unforeseeable events beyond the control of the source, as further defined by Section 39.5(7)(k)(iv) of the Act.

ii. The permitted source was at the time being properly operated;

iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations [Section 39.5(7)(k)(iv) of the Act].

#### 9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this

permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

## 9.12 Reopening and Reissuing Permit for Cause

### 9.12.1 Permit Actions

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

### 9.12.2 Reopening and Revision

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

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

### 9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation and reissuance under Section 39.5(15) of the Act, pursuant to Sections 39.5(5)(e) and (i) of the Act.

### 9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the

Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

#### 9.13 Severability Clause

The provisions of this permit are severable. In the event of a challenge to any portion of the permit, other portions of the permit may continue to be in effect. Should any portion of this permit be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected and the rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

#### 9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit [Section 39.5(5)(l) and (o) of the Act].

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

#### 9.15 General Authority for the Terms and Conditions of this Permit

The authority for terms and conditions of this permit that do not include a citation for their authority is Section 39.5(7)(a) of the Act, which provides that the Illinois EPA shall include such provisions in a CAAPP permit as are necessary to accomplish the purposes of the Act and to assure compliance with all applicable requirements. Section 39.5(7)(a) of the Act is also another basis of authority for terms and conditions of this permit that do include a specific citation for their authority.

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

**10.0 ATTACHMENTS**

Attachment 1 Example Certification by a Responsible Official

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

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

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

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

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

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

Attachment 2 Emissions of Particulate Matter from Process Emission Units

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

- i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A(P)^B$$

where:

P = Process weight rate; and  
 E = Allowable emission rate; and,

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

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

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

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

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

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

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

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

i. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any process emission unit for which construction or modification commenced prior to April 14, 1972, which, either alone or in combination with the emission of particulate matter from all other similar process emission units at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.322 [35 IAC 212.322(a)].

ii. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.322(b)]:

$$E = C + A(P)^B$$

where:

P = Process weight rate; and  
E = Allowable emission rate; and,

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

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

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

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

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

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

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

Attachment 3 Guidance

The Illinois has prepared guidance for sources on the Clean Air Act Permit Program (CAAPP) that is available on the Internet site maintained by the Illinois EPA, [www.epa.state.il.us](http://www.epa.state.il.us). This guidance includes instructions on applying for a revision or renewal of the CAAPP permit.

Guidance On Revising A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-revising.pdf](http://www.epa.state.il.us/air/caapp/caapp-revising.pdf)

Guidance On Renewing A CAAPP Permit:

[www.epa.state.il.us/air/caapp/caapp-renewing.pdf](http://www.epa.state.il.us/air/caapp/caapp-renewing.pdf)

The application forms prepared by the Illinois EPA for the CAAPP are also available from the Illinois EPA's Internet site:

[www.epa.state.il.us/air/caapp/index.html](http://www.epa.state.il.us/air/caapp/index.html)

These CAAPP application forms should also be used by a CAAPP source when it applies for a construction permit. For this purpose, the appropriate CAAPP application forms and other supporting information, should be accompanied by a completed Application For A Construction Permit form (199-CAAPP) and Fee Determination for Construction Permit Application form (197-FEE):

[www.epa.state.il.us/air/caapp/199-caapp.pdf](http://www.epa.state.il.us/air/caapp/199-caapp.pdf)

[www.epa.state.il.us/air/permits/197-fee.pdf](http://www.epa.state.il.us/air/permits/197-fee.pdf)

JRC:09100011:psj