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1.0 SOURCE IDENTIFICATION

1.1 Source

Roxana Resource Recovery, LLC
4600 Cahokia Creek Road
Roxana, Illinois 62084
618/659-1036

I.D. No.: 119090AAI
Standard Industrial Classification: 4911, Electric Services

1.2 Owner/Parent Company

Roxana Resource Recovery, LLC
40 Tower Lane
Avon, Connecticut 06001

1.3 Operator

Illinois Electrical Generation Partners, LLC
1420 Church Street, Unit D
Bohemia, New York 11716

Steve Laliberty/Vice President, Operations
631/563-6336

1.4 General Source Description

The Roxana Resource Recovery, LLC is located at 4600 Cahokia Creek Road. The source utilizes landfill gas from Roxana Landfill, ID# 119090AAF for the production of electricity. Roxana Landfill owns and operates the landfill, gas collection system and flare. Roxana Resource Recovery, LLC has contracted with Roxana Landfill allowing them to use the gas generated from the landfill in its gas to energy engines-generators.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

| | |
|------------------|--|
| 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 |
| bhp | Brake Horsepower |
| Btu | British thermal unit |
| CAA | Clean Air Act [42 U.S.C. Section 7401 et seq.] |
| CAAPP | Clean Air Act Permit Program |
| CAM | Compliance Assurance Monitoring |
| CAS | Chemical Abstract Service |
| CO | Carbon Monoxide |
| CFR | Code of Federal Regulations |
| ERMS | Emissions Reduction Market System |
| Ft ³ | Cubic Feet |
| Gal | Gallon |
| HAP | Hazardous Air Pollutant |
| hr | hour |
| IAC | Illinois Administrative Code |
| I.D. No. | Identification Number of Source, assigned by Illinois EPA |
| Illinois EPA | Illinois Environmental Protection Agency |
| °K | Degrees Kelvin |
| kPa | Kilopascals |
| kg | Kilograms |
| kW | Kilowatts |
| l | liters |
| lb | Pound |
| ILCS | Illinois Compiled Statutes |
| MBtu | Million British thermal units |
| Mg | Megagrams |
| MW | Megawatts |
| mmBtu | Million British thermal units |
| mmHg | Millimeters of Mercury |
| mmscf | Million standard cubic feet |
| mo | Month |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| NO _x | Nitrogen Oxides |
| NSPS | New Source Performance Standards |
| psia | pounds per square inch absolute |
| PM | Particulate Matter |
| PM ₁₀ | Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods |
| ppm | parts per million |

| | |
|-----------------|---|
| PSD | Prevention of Significant Deterioration |
| RMP | Risk Management Plan |
| SIP | State Implementation Plan |
| SO ₂ | Sulfur Dioxide |
| T1 | Title I - identifies Title I conditions that have been carried over from an existing permit |
| T1N | Title I New - identifies Title I conditions that are being established in this permit |
| T1R | Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit |
| USEPA | United States Environmental Protection Agency |
| VOL | Volatile Organic Liquid |
| VOM | Volatile Organic Material |
| 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:

250 gallon new glycol storage tank
250 gallon used glycol storage tank

- 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)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

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

3.2 Compliance with Applicable Requirements

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

Permittee shall comply with the following requirements, as applicable:

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

3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|--------------------|--|------------------|----------------------------|
| Engine Generator 1 | Landfill gas fired internal combustion engine used to produce electricity* | November 1999 | None |
| Engine Generator 2 | Landfill gas fired internal combustion engine used to produce electricity* | November 1999 | None |
| Engine Generator 3 | Landfill gas fired internal combustion engine used to produce electricity* | November 1999 | None |
| Engine Generator 4 | Landfill gas fired internal combustion engine used to produce electricity* | March 2000 | None |

*Landfill gas utilized in the above engines is generated by Roxana Landfill, ID# 119090AAF.

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 CO and NO_x emissions.
- 5.1.2 This permit is issued based on the source requiring a CAAPP permit because the source is subject to a standard, limitation, or other requirement under Section 111 (NSPS) or Section 112 (HAPs) of the CAA for which USEPA requires a CAAPP permit, or because the source is in a source category designated by the USEPA, pursuant to 40 CFR 70.3(a)(2), (3), and (5) (40 CFR 70.3 Applicability) [Section 39.5(2)(a)(ii) and (iv) of the Act].
- 5.1.3 This permit is issued based on the source not being a major source of HAPs.
- 5.1.4 For purposes of the CAAPP, Roxana Resource Recovery, LLC is considered a single source with Roxana Landfill, ID# 119090AAF, located at 4600 Cahokia Creek Road, Roxana. The source has elected to obtain separate CAAPP permits for these locations.

It should be noted that Roxana Resource Recovery, LLC is a separate entity, which has contracted with the Roxana Landfill to use the gas generated from the landfill in its gas to energy engines-generators. Roxana Resource Recovery LLC owns and operates only the engine-generators.

5.2 Applicable Regulations

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

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

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Fugitive Particulate Matter Operating Program

- a. This source shall be operated under the provisions of an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions [35 IAC 212.309(a)].
- b. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this Condition and shall be submitted to the Illinois EPA [35 IAC 212.312].
- c. All normal traffic pattern roads and parking facilities located at this source shall be paved or treated with water, oils, or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils, or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program [35 IAC 212.306].

5.2.4 Ozone Depleting Substances

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

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

approved technician certification program pursuant to 40 CFR 82.161.

5.2.5 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.6 Future Applicable Regulations

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

5.2.7 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

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

5.3 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) | 16.74 |
| Sulfur Dioxide (SO ₂) | 3.19 |
| Particulate Matter (PM) | 10.30 |
| Nitrogen Oxides (NO _x) | 111.00 |
| HAP, not included in VOM or PM (HCl) | 4.64 |
| TOTAL | 145.87 |

5.5.2 Emissions of Hazardous Air Pollutants

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

5.5.3 Other Source-Wide Emission Limitations

The annual emissions from the source (i.e. all emission units from Roxana Resource Recovery, LLC ID# 119090AAI and Roxana Landfill Inc. ID# 119090AAF combined) shall not exceed the following limitations:

| Pollutant | Emissions (Tons/Year) | Underlying Rules |
|-----------------|-----------------------|------------------|
| CO | 225.0 | 40 CFR 52.21 |
| NO _x | 225.0 | 40 CFR 52.21 |

The limits on CO and NO_x are limitations established in Permit 99120025, issued to Roxana Resource Recovery, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned Permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.

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).

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with

Condition 5.5.1, pursuant to Section 39.5(7) (b) of the Act:

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

5.6.2 Records for Operating Scenarios

N/A

5.6.3 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.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

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

5.7.2 Annual Emissions Report

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

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

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

6.0 [NOT APPLICABLE TO THIS PERMIT]

7.0 UNIT SPECIFIC CONDITIONS

7.1 Engine Generators

7.1.1 Description

Four (4) landfill gas fired internal combustion engines, each with a rated heat input of 8.82 mmBtu/hr, and electricity generator sets.

7.1.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|--------------------|--|----------------------------|
| Engine Generator 1 | Landfill gas fired internal combustion engine used to produce electricity* | None |
| Engine Generator 2 | Landfill gas fired internal combustion engine used to produce electricity* | None |
| Engine Generator 3 | Landfill gas fired internal combustion engine used to produce electricity* | None |
| Engine Generator 4 | Landfill gas fired internal combustion engine used to produce electricity* | None |

*Engines are used to control gas generated at the landfill owned and operated by Roxana Landfill as noted in Condition 4.

7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected engines" for the purpose of these unit-specific conditions, are the engine generators described in Condition 7.1.1 and 7.1.2.
- b. The affected engines are subject to the emission limits identified in Condition 5.2.2.
- c. This facility is subject to the New Source Performance Standard (NSPS) for air emissions from Municipal Solid Waste Landfills, 40 CFR 60, Subparts A and WWW. Illinois EPA is administrating NSPS in Illinois on behalf of the United States EPA under a delegation agreement and through Section 9.1 of the Illinois Environmental Protection Act.
 - i. The Permittee shall comply with the control requirements of the NSPS, 40 CFR 60.752(b)(2)(iii), until such time as the Permittee or owner/operator of the associated landfill demonstrates that the associated

landfill is not subject to the control requirements, in accordance with applicable provisions of the NSPS.

- ii. For purposes of compliance with the NSPS, the internal combustion engines are considered to be a control system utilizing enclosed combustor type control devices, as defined under 40 CFR 60.751.
- iii. This permit is issued based upon the internal combustion engines, covered under this permit, either alone or in combination, reducing NMOC emissions by 98 weight percent or reducing the outlet NMOC concentration of all control vents to less than 20 parts per million by volume (ppmv), dry basis as hexane at 3 percent oxygen. [40 CFR 60.752(b)(2)(iii)B]
- iv. The Permittee shall operate the NMOC control system so as to comply with the provisions of 40 CFR 60.753. Specifically, these include:
 - A. Design and operation of the control system in compliance with 40 CFR 60.752(b)(2)(iii).
 - B. In the event that this control system is inoperable and the alternative control flaring system owned by the landfill is not operational, the necessary steps will be taken within 1 hour to shut down the gas mover system and close all valves at this control system that contribute to venting the gas into atmosphere; [40 CFR 60.753(e)] and
 - C. Operation of the control system at all times when the collected gas is routed to the system. [40 CFR 60.753(f)]

7.1.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected engines not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected engines are subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).
- b. This permit is issued based on the affected engines not being subject to 40 CFR Part 72, Acid Rain Program, because each of the affected engines serve one or more generators with the total nameplate

capacity of 25 MWe or less, pursuant to 40 CFR 72.7(a) (1).

7.1.5 Operational and Production Limits and Work Practices

- a. Landfill gas, supplemented as needed with natural gas or other gaseous fuel, shall be the only fuels fired in the engines and the combined fuel usage (two new and three existing engines) shall not exceed the following limits. Compliance with the annual limit shall be based upon a rolling average of 12 months of fuel usage and thermal loading for the engines.

| <u>Hourly Limit</u> | <u>Annual Limit</u> |
|---------------------|---------------------|
| 88,170 scf/hr | 772 mmscf/yr |

These limits are based on the maximum fuel usage for the facility and an assumed average thermal loading of 500 BTU/scf.

- b. The maximum braking horsepower of each engine shall not exceed 1,387 bhp.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected engines are subject to the following:

Emissions from the affected engines shall not exceed the following limits:

| Pollutant | Lb/Hr | Ton/Yr |
|-----------------|-------|--------|
| NO _x | 25.50 | 111.0 |
| SO ₂ | 0.73 | 3.19 |
| CO | 45.90 | 201.0 |
| PM | 2.34 | 10.30 |
| VOM | 3.82 | 16.74 |

The limits for VOM, NO_x and CO are based on the manufacturers guarantee data, limits for PM and SO₂ are based on AP-42 emission factors [T1R].

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) [T1R].

The above limitations contain revisions to previously issued Permit 99120025. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent

with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the limit for VOM was revised to reflect the manufacturers guarantee data, which was the limit set on the affected engines in Permit 99020015. [T1R].

7.1.7 Testing Requirements

- a. Within 90 days of a written request from the Illinois EPA, the Permittee shall perform such other emissions and/or performance tests specified by the Illinois EPA. [40 CFR 60.8(a) and 35 IAC 201.282] The 90 day time period will automatically be extended for an additional 60 days upon written request by the Permittee. The Illinois EPA may provide additional time for the performance of these tests upon written request by the Permittee.

7.1.8 Monitoring Requirements

- a. As an alternative to the temperature monitoring requirements provided under 40 CFR 60.756(b)(1), the Permittee shall operate and maintain each engine according to manufactures specifications.
- b. The Permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, equipment that will enable the continuous monitoring of each engine's hours of operation. [40 CFR 60.13(i), 60.752(e), and 35 IAC 201.281]
- c. The Permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment: [40 CFR 60.756(b) and 35 IAC 201.281]
 - i. A gas flow rate measuring device that shall record the flow to the control system (e.g., the total combined gas flow to all the engines) at least every 15 minutes;

- ii. A gas flow rate measuring device that provides a measurement of gas flow to or bypass of the control system. The owner or operator shall either:
 - A. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control system at least every 15 minutes; or
 - B. Secure the bypass line valve(s) in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve(s) are maintained in the closed position and that the gas flow is not diverted through the bypass line(s).

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected engines to demonstrate compliance with Conditions 5.5.1, 5.5.3, 7.1.3 and 7.1.6 pursuant to Section 39.5(7)(b) of the Act:

- a. The Permittee keep up-to-date, readily accessible records for the life of the control system of the data listed in 40 CFR 60.758(b)(2) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the engine specifications shall be maintained until removal.
 - i. Any operating parameters that are continuously monitored and recorded that are associated with proper operation of the engines.
 - ii. The NMOC reduction efficiency or parts per million by volume emission rate determined as specified in 40 CFR 60.752(b)(2)(iii)(B).
- b. The Permittee shall keep records of the equipment operating parameters specified to be monitored in 40 CFR 60.756(b) and (d) as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

- c. The Permittee shall keep records of any periods of operation during which any engine exceed the operating parameters preset by the engine manufacture or those established by the most recent performance test at which compliance with 40 CFR 60.752(b)(2)(iii) was determined. These incidents shall also be reported under 40 CFR 60.757(f).
- d. The Permittee shall keep up-to-date, records of the indication of flow to the control system or the monitoring conducted pursuant to Condition 7.1.8(c). This includes but is not limited to an indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756. [40 CFR 60.758(c)(2)]
- e. The Permittee shall keep records for each startup of an engine that, as a minimum, shall include:
 - i. Duration of the startup, i.e. start time and time startup discontinued or normal operation achieved, i.e., stable operation at load;
 - ii. The nature of opacity, i.e., severity and duration, during the startup and the nature of opacity at the conclusion of startup, if above normal;
 - iii. Whether exceedance of Condition 5.5.2 may have occurred during startup, with explanation and estimated duration (minutes);
- f. The Permittee shall maintain records of the following items for the control system in order to demonstrate compliance with Conditions 5.5, 7.1.5 and 7.1.6;
 - i. Annual landfill gas usage determined each month based on the current month of records usage plus the usage for the preceding 11 months;
 - ii. Total hours of operation per year for the control system (e.g., the total combined hours of operation of all the engines) determined each month based on the current month of records hours of operation for the control system plus the hours of operation for the control system for the preceding 11 months;
 - iii. Total annual NO_x, PM, SO₂, CO, and VOM emissions from the engines, based on the current month of records months landfill gas usage plus the usage for the preceding 11 and

the applicable emission factors, with supporting calculations;

- vi. Total annual NO_x, PM, SO₂, CO, and VOM emissions from the engines, based on the current month of records months landfill gas usage plus the usage for the preceding 11 and the applicable emission factors, with supporting calculations;
 - v. A maintenance and repair log for each engine, listing each activity performed with date.
- g. Records shall be retained for five years and shall be readily available for inspection and copying by the Illinois EPA upon request. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

7.1.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Compliance Section 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 of HAP, VOM, PM, CO, SO₂ or NO_x in excess of the limits in Condition 5.5 or 7.1.6, calculated by using emission factors and equation from Condition 7.1.12 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.
 - ii. Notification within 60 days of operation of an affected engine that may not have been in compliance with the opacity limitations of Condition 5.2.2, as determined from the records required by Condition 7.1.9(e), with a copy of such record for each incident.
 - iii. If there is any other exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA within 30 days after the exceedance. The report shall include the emissions released in accordance with recordkeeping requirements, a copy of the relevant records, and a description of the

exceedances or violation and efforts to reduce emissions and future occurrences.

- b. The Permittee shall submit to the Illinois EPA annual reports of the following information. The initial annual report shall be submitted within 180 days of installation and start-up of the control system, and shall include the initial performance test report required under 40 CFR 60.8. Thereafter, these reports shall be submitted with the annual emissions report, as required under 35 IAC Part 254. [40 CFR 60.757(f)]
- i. Description and duration of all periods when the gas stream is diverted from the control system through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756 [40 CFR 60.757(f) (2)].
 - ii. Description and duration of all periods when the control system was not operating for a period exceeding 1 hour and length of time the control system was not operating [40 CFR 60.757(f) (3)].
 - iii. Other reportable exceedances as shown in Condition 7.1.9(c) and (d) and defined under 40 CFR 60.758(c).
 - iv. Annual engines VOM, PM, CO, SO₂ and NO_x emissions, with calculations, based upon the compliance procedures in Condition 7.1.12.
 - v. If applicable, the annual NO_x, PM, SO₂, CO, and VOM emissions which exceeded the annual limitations in Conditions 5.5 and 7.1.6, if any.

If there have been no exceedances during the prior calendar year the Annual Emissions Report shall include a statement to that effect.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

Compliance with the emission limits in Condition 7.1.6 and 5.5 shall be based on the recordkeeping requirements in Condition 7.1.9 and calculated based on the emission factors developed from the emission testing performed on

September 20, 2000 or the emission rates below, whichever is higher, and formulas listed below:

| Pollutant | Emission Rates (Lb/hr) | Notes |
|-----------------|---------------------------|-------|
| PM | 0.47 | 1 |
| NO _x | 5.10 | 2 |
| SO ₂ | 0.15 | 3 |
| VOM | 0.76 | 4 |
| CO | 9.17 | 5 |

Notes:

1. Emissions factor based upon the AP-42 emission factor (2.9×10^{-3} lb/hr/dscf methane) and the maximum gas flow rate (fuel consumption) provided by the engine manufacturer (294 scfm).
2. Emission factor provided by the engine manufacturer (1.67 g/bhp-hr) and the maximum braking horsepower of the engine (1387 bhp)
3. Emissions factor based upon the calculation procedures in AP-42 and the maximum gas flow rate (fuel consumption) provided by the engine manufacturer (294 scfm)
4. Emission factor provided by the engine manufacturer (0.25 g/bhp-hr) and the maximum braking horsepower of the engine (1387 bhp)
5. Emission factor provided by the engine manufacturer (3.0 g/bhp-hr) and the maximum braking horsepower of the engine (1387 bhp)

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 February 27, 2002 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

8.3 Emissions Trading Programs

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

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

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

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

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

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

8.5 Testing Procedures

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

8.6 Reporting Requirements

8.6.1 Monitoring Reports

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

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

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

8.6.2 Test Notifications

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

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

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

8.6.3 Test Reports

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

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

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA - Air Compliance Section
Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Regional Field Office
Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234

iii. Illinois EPA - Air Permit Section (MC 11)

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

iv. USEPA Region 5 - Air Branch

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

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

8.7 Obligation to Comply with Title I Requirements

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

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

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

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

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

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

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

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

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

9.4 Obligation to Comply With Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

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

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

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

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

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

9.9 Certification

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

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

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

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

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

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

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

9.12.2 Reopening and Revision

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

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

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

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

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

9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

10.1 Attachment 1 Summary of Emission Units

The following emission units are owned and operated by Roxana Resource Recovery, LLC, ID# 119090AAI:

| Emission Unit | Description | Date Constructed | Emission Control Equipment |
|--------------------|--|------------------|----------------------------|
| Engine Generator 1 | Landfill gas fired internal combustion engine used to produce electricity* | November 1999 | None |
| Engine Generator 2 | Landfill gas fired internal combustion engine used to produce electricity* | November 1999 | None |
| Engine Generator 3 | Landfill gas fired internal combustion engine used to produce electricity* | November 1999 | None |
| Engine Generator 4 | Landfill gas fired internal combustion engine used to produce electricity* | March 2000 | None |

*Landfill gas utilized in the above engines is generated by Roxana Landfill, ID# 119090AAF.

The following emission units are owned and operated by Roxana Landfill, Inc, ID# 119090AAF:

| Emission Unit | Description | Significant Dates | Emission Control Equipment |
|-----------------------|--------------------------------|---|----------------------------|
| MSW Landfill | Municipal Solid Waste Landfill | <u>Commenced Construction</u> 1963 <u>Last Modification</u> May 1995 | Engines* and/or Flare |
| Fugitive PM Emissions | Road Dust | - | None |

*Engines are owned and operated by Roxana Resource Recovery, LLC ID# 119090AAI.

10.2 Attachment 2 Emissions of Particulate Matter from New Process Emission Units

10.2.1 Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

- a. 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, 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)].
- b. 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,

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

| | Metric | English |
|---|--------|---------|
| P | Mg/hr | Ton/hr |
| E | kg/hr | lb/hr |
| A | 1.214 | 2.54 |
| B | 0.534 | 0.534 |

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

| | Metric | English |
|---|--------|---------|
| P | Mg/hr | Ton/hr |
| E | kg/hr | lb/hr |
| A | 11.42 | 24.8 |
| B | 0.16 | 0.16 |

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

| Metric | | English | |
|--------|-------|---------|-------|
| P | E | P | E |
| Mg/hr | kg/hr | Ton/hr | lb/hr |
| 0.05 | 0.25 | 0.05 | 0.55 |

| Metric | | English | |
|--------|-------|---------|-------|
| P | E | P | E |
| Mg/hr | kg/hr | Ton/hr | lb/hr |
| 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 |

10.3 Attachment 3 Example Certification by a Responsible Official

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

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.4 Attachment 4 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.

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

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

| Signature Block | |
|--|--------------------|
| This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete. | |
| 30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized Signature: | |
| BY: | _____ |
| AUTHORIZED SIGNATURE | TITLE OF SIGNATORY |
| _____ | _____/_____/_____ |
| TYPED OR PRINTED NAME OF SIGNATORY | DATE |

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.

10.6 Attachment 6 Guidance on Renewing This Permit

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

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

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

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

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

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

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

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

Mail renewal applications to:

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