

217/782-2113

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

PERMITTEE

Land and Lakes Company
Attn: James J. Cowhey Jr.
123 North Northwest Highway
Park Ridge, Illinois 60068

Application No.: 99100097 I.D. No.: 031069ABW
Applicant's Designation: River Bend Pr. Date Received: October 29, 1999
Operation of: Sanitary Landfill
Date Issued: December 20, 2001 Expiration Date²: December 20, 2006
Source Location: 138th Street & Cottage Grove Avenue, Village of Dolton, Cook
Responsible Official: James J. Cowhey Jr., Vice President

This permit is hereby granted to the above-designated Permittee to OPERATE a Sanitary Landfill, 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 Mike Davidson at 217/782-2113.

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

DES:MED:psj

cc: Illinois EPA, FOS, Region 1

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

² Except as provided in Condition 8.7 of this permit.

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1.0 SOURCE IDENTIFICATION

1.1 Source

Land and Lakes Company
River Bend Prairie & Land and Lakes No. 1 and 2
138th Street & Cottage Grove Avenue
Village of Dolton, Illinois 60419
847/825-5000

I.D. No.: 031069ABW
Standard Industrial Classification: 4953, Refuse Systems

1.2 Owner/Parent Company

Landfill Owner/Parent
Land and Lakes Company
123 North Northwest Highway
Park Ridge, Illinois 60068

1.3 Operator(s)

Land and Lakes Company
P.O. Box 778
Park Ridge, Illinois 60068

James J. Cowhey Jr., Vice President
847/825-5000

1.4 General Source Description

The source consists of a two waste disposal sites and associated landfill gas collection and control system. The Land and Lakes Company operates both an active waste disposal site (River Bend Prairie Landfill - BOL ID No. 0310690003) and an inactive disposal site (Land and Lakes No. 1 and 2 - BOL ID No. 031600005) which are located at 138th Street & Cottage Grove Avenue near the Village of Dolton. The design capacity of both landfill sites combined is 9,134,371 Megagrams. Landfill gas emissions from both disposal site are controlled with a backup utility (open) flare and an adjacent gas to energy plant owned and operated by Zapco Energy Tactics Corp. (031069ABX).

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

ACWM	Asbestos-Containing Waste Material
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
Btu	British thermal unit
°C	Degrees Celsius or centigrade
C _{NMOC}	Average NMOC Concentration
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
°F	degrees Fahrenheit
HAP	Hazardous Air Pollutant
Hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
kW	kilowatts
lb	pound
lb/MBTU	pounds per Million British thermal units
Mg	Megagrams (1 million grams = 1.102 tons)
mmBtu	Million British thermal units
MSW	Municipal Solid Waste
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMOC	Nonmethane Organic Compounds
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SO ₂	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

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

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

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	Emission Control Equipment
MSW Landfill		Gas to Energy Facility ¹ with Backup Utility (Open) Flare ²
	<p style="text-align: center;"><u>Active Area</u></p> <p style="text-align: center;"><u>River Bend Prairie</u> <u>Commenced Waste Operations</u></p> <p style="text-align: center;">1997</p> <p style="text-align: center;"><u>Last Modification:</u></p> <p style="text-align: center;">October 21, 1998</p> <hr/> <p style="text-align: center;"><u>Inactive Area</u></p> <p style="text-align: center;"><u>No. 1 and 2</u> <u>Commenced Waste Operations</u></p> <p style="text-align: center;">1940's</p> <p style="text-align: center;"><u>Waste Operations Initially Permitted</u></p> <p style="text-align: center;">June 20, 1975 [BOL Permit 1975-46-DE]</p> <p style="text-align: center;"><u>Ceased Accepting Waste</u></p> <p style="text-align: center;">July 16, 1993</p>	
Fugitive PM ₁₀ Emissions	<u>Fugitive Dust</u>	Dust Control Program

¹ Adjacent gas to energy plant owned and operated by Zapco Energy Tactics Corp. (031069ABX).
² Backup utility (open) flare owned and operated by Land and Lakes Co.

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 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), or (5) (40 CFR 70.3 Applicability) [Section 39.5(2)(a)(ii) or (iv) of the Act].]

5.1.2 For purposes of the CAAPP and Title I of the Clean Air Act, Land and Lakes Company is considered a single source with Zapco Energy Tactics Corp., I.D. No. 031069ABX, located at 138th Street & Cottage Grove Avenue near the Village of Dolton. The source has elected to obtain separate CAAPP permits for these locations.

It should be noted that ZAPCO Energy Tactics Corp is a separate entity, which has contracted with the Land and Lakes Company to use the gas generated from the landfill in its landfill gas to energy facility.

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, and through the sources compliance with the requirements of Condition 5.2.3.

- 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

Based upon the location of the source (See 35 IAC 212.324(a)(1)), the Permittee shall comply with the requirements of 35 IAC 212.304 through 212.310, 212.312, and 212.316, as applicable. [35 IAC 212.302(b)]

At the time of issuance of this permit, the following was specifically applicable to the source:

- a. 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].
- b. 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)]

At a minimum the operating program shall contain the information shown in 35 IAC 212.310.

- c. 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].
- d. 35 IAC 212.301 (See Condition 5.2.2(a)) shall not apply and spraying pursuant to 35 IAC 212.304 through 212.310 and 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements. [35 IAC 212.314]

- e. Based upon the applicability of 35 IAC 212.316, the source shall comply with the following limitations:
 - i. No person shall cause or allow fugitive particulate matter emissions from any roadway or parking area to exceed an opacity of 10 percent, [35 IAC 212.316(c)]
 - ii. No person shall cause or allow fugitive particulate matter emissions from any storage pile to exceed an opacity of 10 percent, to be measured four feet from the pile surface. [35 IAC 212.316(d)]
 - iii. Unless an emission unit has been assigned a specific particulate matter, PM-10, or fugitive particulate matter emissions limitation pursuant to the limitations in 35 IAC 212 Subparts K, R, or S, no person shall cause or allow fugitive particulate matter emissions from any emission unit to exceed an opacity of 20 percent. [35 IAC 212.316(f)]

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

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

5.2.4 Risk Management Plan

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

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or

- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.
- 5.2.5
- a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
 - b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.
- 5.2.6 Episode Action Plan
- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
 - b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
 - c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
 - d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

- i. Illinois EPA, Compliance Section; and
- ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
- iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.2.7 PM₁₀ Contingency Measure Plan

This stationary source, as defined in 35 IAC 212.700, is required to prepare and submit a contingency measure plan reflecting the PM₁₀ emission reductions as set forth in 35 IAC 212.703. Such plan is incorporated by reference into this permit and shall be implemented in accordance with 35 IAC 212.704. The source shall comply with the applicable requirements of 35 IAC Part 212, Subpart U, incorporated herein by reference.

5.3 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the source not being subject to 35 IAC 212.304 because the source's potential particulate emissions from all emission units does not exceed 90.8 Mg/yr (100 T/yr).
- b. This permit is issued based on the source not being subject to 35 IAC 212.305 because the source does not have any conveyor loading operations at the source.
- c. This permit is issued based on the source not being subject to 35 IAC 212.307 because the source does not have any unloading and transporting operations of materials collected by pollution control equipment.
- d. This permit is issued based on the source not being subject to 35 IAC 212.308 because the source does not have any crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations.
- e. This permit is issued based on the source not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the source because the affected MSW landfill is subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

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:

- a. The volume of waste deposited in the MSW landfill shall not exceed the maximum design capacity set in the latest Permit(s), issued by the Illinois EPA's Bureau of Land (BOL), for the facility. Based upon permitted capacity indicated in BOL Permit No. #1998-115-SP (BOL ID No. 0310690003) and the reported design capacity of the inactive site (BOL ID No. 0316000005) the combined capacity of the landfill shall not exceed 9,134,371 Mg (See Condition 1.4), which is the basis for determining potential controlled emissions for the landfill (See Condition 5.5.3).
- b. The Permittee shall implement a program to monitor for wind erosion on the landfill surfaces, reentrainment during landfill activities and fugitive particulate matter emissions from any roadway or parking area on a weekly basis.

No inspection shall be necessary for wind erosion from the surface the landfill when the landfill is covered with snow and/or ice and for any landfill activity if precipitation has occurred that is sufficient for that day to ensure compliance with the provisions of the approved operating program required under 35 IAC 212.309(a). Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

Corrective action shall be implemented pursuant to the approved operating program.

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)	4.862
Sulfur Dioxide (SO ₂)	3.913
Particulate Matter (PM)	17.709
Nitrogen Oxides (NO _x)	15.043
HAP, not included in VOM or PM	1.993
Total	43.520

It should be noted that VOM is shown as the total of VOM (1.364 tons/year) and NMOC (3.498 tons/year) indicated in the application.

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 Permittee shall comply with the following source wide limits:

- a. The annual emissions from the source shall not exceed the following limitations:

Pollutant	Emissions (Tons/Year)
Volatile Organic Material (VOM)	3.11
Sulfur Dioxide (SO ₂)	17.34
Particulate Matter (PM)	13.54
Nitrogen Oxides (NO _x)	106.3
Carbon Monoxide (CO)	248.0

The above limits are established based upon the MSW landfill's emissions being controlled as described in Condition 7.1.1.

The limits on particulate matter (PM₁₀), nitrogen oxide (NO_x), carbon monoxide (CO) and sulfur dioxide (SO₂) are limitations established in Permits 00060013 (031069ABX), pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permits do 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. See Condition 7.1.6 [T1].

The limits on volatile organic material (VOM) are limitations established in Permit 96080086, pursuant to 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 35 IAC Part 203. See Condition 7.1.6 [T1].

It should be noted that the above limits constitutes maximum emissions based upon a comparison of the two referenced permits.

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 General Records for Control of Fugitive Particulate Matter Emissions

The Permittee shall keep written records of the application of control measures as may be needed for compliance with the fugitive particulate matter opacity limitations shown in Condition 5.2.3. The records shall include at least the following [35 IAC 212.316(g)(1) and (2)]:

- a. The name and address of the source;
- b. The name and address of the owner and/or operator of the source;
- c. A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways;

- d. For each application of water or chemical solution to roadways by truck: the name and location of the roadway controlled, application rate of each truck, frequency of each application, width of each application, identification of each truck used, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identity of the chemical;
- e. For application of physical or chemical control agents: the name of the agent, application rate and frequency, and total quantity of agent, and, if diluted, percent of concentration, used each day; and
- f. A log recording incidents when control measures were not used and a statement of explanation.

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

5.7.2 Annual Emissions Report

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

5.7.3 General Reporting for Control of Fugitive Particulate Matter Emissions

- a. The Permittee shall submit an annual report, containing a summary of control measures used to assure compliance with the fugitive particulate matter opacity limitations referenced in Condition 5.2.3, to the Illinois EPA, Compliance Section. This report shall be submitted with the Annual Emissions Report (Condition 9.7). [35 IAC 212.316(g)(1)] and 212.316(g)(3) through (5)]:
- b. Copies of all records required under Condition 5.6.2 shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA and shall be transmitted to the Illinois EPA by a company-designated person with authority to release such records. [35 IAC 212.316(g)(3)]
- c. A quarterly report shall be submitted to the Illinois EPA stating the following: the dates any necessary control measures were not implemented, a listing of those control measures, the reasons that the control measures were not implemented, and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to the requirements listed in Condition 5.2.3. This report shall be submitted to the Illinois EPA Compliance Section thirty (30) calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31. [35 IAC 212.316(g)(5)]

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

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.

- a. For the purpose of estimating VOM emissions from the storage tanks, the most current version of the USEPA TANKS program is acceptable.
- b. For the purpose of estimating HAP emissions from storage tanks at the source, the vapor weight percent (based on a 1992 USEPA survey) of each HAP for each organic liquid times the VOM emissions contributed by that organic liquid is acceptable.

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01 Municipal Solid Waste Landfill with Active Gas Extraction System

7.1.1 Description

The municipal solid waste landfill is divided into two waste disposal sites, which consists of an inactive landfill site (Land and Lakes No. 1 and 2), i.e., no waste disposal activities at the site, and an adjacent area (River Bend Prairie Landfill), which is actively accepting municipal solid waste. Landfill gas emissions are generated through the decomposition of the municipal solid waste deposited in the landfill. Emissions are collected by an active gas extraction system owned and operated by Land and Lakes Co. The makeup of the gas is mostly methane, carbon dioxide, and a small percentage of nonmethane organic compounds. Landfill gas emissions from both landfill sites are burned at an adjacent gas to energy plant owned and operated by Zapco Energy Tactics Corp. (031069ABX) (see also Section 7.2) and in a backup utility (open) flare owned and operated by Land and Lakes Co. (see also Section 7.3).

The Land and Lakes No. 1 and 2 landfill site is an inactive waste disposal site in regards to asbestos disposal activities. No asbestos-containing waste material was accepted at the Land and Lakes No. 1 and 2 after 1990. The River Bend Prairie landfill site began accepting asbestos waste at the site on January 1, 2001.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
01	Municipal Solid Waste Landfill with Active Gas Extraction System	Control 01 - Gas To Energy Plant or Control 02 - Utility Flare

7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected landfill" for the purpose of these unit-specific conditions, is a landfill described in Conditions 7.1.1 and 7.1.2.
- b. The affected landfill is subject to the NSPS for Municipal Solid Waste Landfills, 40 CFR 60 Subparts A and WWW, because the affected landfill commenced construction, reconstruction or modification or began accepting waste on or after May 30, 1991. The Illinois EPA administers the NSPS for subject sources

in Illinois pursuant to a delegation agreement with USEPA.

At all times, the Permittee shall maintain and operate the MSW landfill, including air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, as required by the NSPS, 40 CFR 60.11(d).

At the time of issuance of this permit the design capacity of the landfill is equal to or greater than 2.5 million megagrams and 2.5 million cubic meters and the calculated NMOC emission rate is less than 50 megagrams per year. Further a NMOC collection and control system, see Condition 7.1.5(a)(i), was not required as per 40 CFR 60.752(b)(2).

- c. The affected landfill is subject to the NESHAP for Asbestos, 40 CFR 61 Subparts A and M, because the affected landfill is a source that is listed in the NESHAP. [40 CFR 61.140]

Specifically, portions of the affected landfill meet the definition of both an active and inactive waste disposal site as defined in 40 CFR 61.141, i.e., the landfill receives or has received asbestos-containing waste material.

- i. For any closed active waste disposal site previously subject to the requirements of 40 CFR 61.154, the Permittee shall comply with the requirements of 40 CFR 61.151 [40 CFR 61.154(g)].
- ii. For any active waste disposal site that receives asbestos-containing waste material from a source covered under 40 CFR 61.149, 61.150, or 61.155, the Permittee must comply with the requirements of 40 CFR 61.154.

As noted in Section 5.1.3, the Land and Lakes Company MSW landfill is considered a single source with Zapco Energy Tactics Corp., I.D. No. 031069ABX, however, Land and Lakes is considered to have primary responsibility in matters of compliance for both the above referenced NSPS and NESHAP requirements.

7.1.4 Non-Applicability of Regulations of Concern

- a. The affected landfill is not subject to the requirements of 35 IAC 212.321, Emissions of Particulate Matter from Process Emission Units, because due to the unique nature of this process, such rules cannot reasonably be applied.

- b. The affected landfill is not subject to the requirements of 35 IAC Part 220, Non-Methane Organic Compounds, because the landfill does not meet the applicability criteria listed in 35 IAC 220.200(a).
- c. This permit is issued based on the affected MSW Landfill not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected MSW landfill is subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

7.1.5 Operational Requirements

- a. NSPS 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills:

The Permittee shall either comply with 40 CFR 60.752 (b)(2) or calculate an NMOC emission rate for the landfill using the procedures specified in 40 CFR 60.754. The NMOC emission rate shall be recalculated annually, except as provided in 40 CFR 60.757(b)(1)(ii). [40 CFR 60.752(b)]

- i. If the calculated NMOC emission rate is less than 50 megagrams per year, the Permittee shall comply with the requirements of 40 CFR 60.752(b)(1).
- ii. If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the Permittee shall comply with the requirements of 40 CFR 60.752(b)(2). These requirements include but are not limited to the following:
 - A. Submittal of a NMOC collection and control system design plan prepared by a professional engineer to the Illinois EPA, Division of Air Pollution Control, Permit Section within 1 year. The NMOC collection and control system design plan shall include the information required under 40 CFR 60.752(b)(2)(i)(A), (B) and (C). [40 CFR 60.752(b)(2)(i)]:
 - B. Installation of a collection and control system that captures the gas generated within the landfill, as required by 40 CFR 60.752(b)(2)(ii)(A) or (B) and 40 CFR 60.752(b)(2)(iii), within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier

3 NMOC sampling and analysis, as provided in 40 CFR 60.754(a)(3) and (4), respectively, demonstrates that the emission rate is less than 50 Megagrams per year, as specified in 40 CFR 60.757(c)(1) or (2). [40 CFR 60.752(b)(2)(ii)]

- C. Routing of all collected landfill gas to a control system that complies with the requirements in either paragraph 40 CFR 60.752(b)(2)(iii) (A), (B) or (C). [40 CFR 60.752(b)(2)(iii)]
- D. Operation of the collection and control device installed to comply with 40 CFR 60 Subpart WWW in accordance with the provisions of 40 CFR 60.753, 60.755 and 60.756. [40 CFR 60.752(b)(2)(iv)]

- b. NESHAP 40 CFR 61 Subpart M: Handling Procedures and Control Measures for the Disposal of ACWM

As applicable for each site, the Permittee shall comply with one of the following:

- i. Inactive Waste Disposal Sites [40 CFR 61.151]:
 - A. The Permittee must comply with one of the following:
 - 1. Either discharge no visible emissions to the outside air from an inactive waste disposal site where ACWM has been deposited [40 CFR 61.151(a)(1)]; or
 - 2. The ACWAM shall be covered with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and the Permittee shall grow and maintain a cover of vegetation on the area adequate to prevent exposure of the ACWM [40 CFR 61.151(a)(2)]; or
 - 3. The Permittee shall cover the asbestos-containing waste material with at least 60 centimeters (2 feet) of compacted nonasbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste. [40 CFR 61.151(a)(3)]

- B. Unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as required in 40 CFR 61.151(b), or comply with 40 CFR 61.151(a)(2) or (a)(3). [40 CFR 61.151(b)}
 - C. The Permittee may use an alternative control method that has received prior approval of the Illinois EPA rather than comply with the requirements of 40 CFR 61.151(a) or (b). [40 CFR 61.151(c)]
- ii. Active Waste Disposal Sites [40 CFR 61.154]:
- A. For any active waste disposal site that receives asbestos-containing waste material from a source covered under 40 CFR 61.149, 61.150, or 61.155, the Permittee must comply with the following requirements:
 - 1. Either there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of 40 CFR 61.154(c) or (d) must be met. [40 CFR 61.154(a)]
 - 2. Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as shown in 40 CFR 61.154(b), or the requirements of 40 CFR 61.154(c)(1) must be met. [40 CFR 61.154(b)]

If applicable, upon Illinois EPA request, the Permittee shall supply appropriate information that will allow the Illinois EPA to determine whether a fence or a natural barrier adequately deters access by the general public. [40 CFR 61.154(b)(3)]
 - 3. Rather than meet the no visible emission requirement of 40 CFR 61.154(a), at the end of each operating day, or at least once

every 24-hour period while the site is in continuous operation, the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall be covered as shown in 40 CFR 61.154(c): [40 CFR 61.154(c)]

4. Rather than meet the no visible emission requirement of 40 CFR 61.154(a), use an alternative emissions control method that has received prior written approval by the Illinois EPA according to the procedures described in 40 CFR 61.149(c)(2). [40 CFR 61.154(d)]

[At the time of issuance of this CAAPP permit, the Permittee has elected to apply at least six (6) inches of daily cover, e.g., compacted nonasbestos-containing material, to the active portions of the landfill where ACWM has been deposited, as per 40 CFR 61.154(c).]

- B. Upon closure of an affected active waste disposal site, the Permittee shall comply with the requirements of 40 CFR 61.151. [40 CFR 61.154(g)]
- c. The Permittee shall obtain a construction permit prior to the installation of any landfill gas collection and control system or modification of the landfill [35 IAC 201.142]. The permit application shall include:
 - i. The information required under 35 Ill. Adm. Code 201.152.
 - ii. Information as to whether the proposed system is intended to comply with NSPS gas collection and control requirements, See Condition 7.1.5(a).
 - iii. Information regarding potential emissions of nitrogen oxide (NO_x), carbon monoxide (CO) and other air pollutants from operation of the system, as related to applicability of PSD.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected MSW landfill is subject to the following:

- a. Controlled emissions from the affected MSW landfill's utility flare shall not exceed the following limits:

	Ton/Mo	Ton/Yr
CO	9.32	93.22
NO _x	1.86	18.6
SO ₂	1.73	17.34
VOM	0.31	3.11

These limits are based on the maximum MSW landfill design capacity, as limited in Condition 5.5.3(b), maximum gas generation rate, maximum utility flare emission rate, and the maximum landfill gas collection system collection efficiency determined through the recordkeeping, reporting and compliance procedures in Conditions 7.1.10, 7.1.11, and 7.1.13, respectively.

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).

The limits on nitrogen oxide (NO_x), volatile organic material (VOM), carbon monoxide (CO) and sulfur dioxide (SO₂) are limitations established in Permit 96080086, 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. See Condition 7.1.6 [T1].

7.1.7 Operating Requirements

a. General Requirements

- i. The open flare(s) shall be designed and operated in accordance with 40 CFR 60.18. This includes the following:
 - A. The open flare(s) shall be designed for and operated with no visible emissions as determined by the methods specified in 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c)(1)]
 - B. The open flare(s) shall be operated with a flame present at all times while landfill gasses are being vented to it,

as determined by the methods specified in 40 CFR 60.18(f). [40 CFR 60.18(c)(2)]

- C. The open flare(s) shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f)(3). [40 CFR 60.18(c)(3)(ii)]
- D. The open flare(s) shall be designed and operated with an exit velocity less than the velocity, V_{max} , as determined by the method specified in 40 CFR 60.18(f)(6). [40 CFR 60.18(c)(5)]
- E. The Permittee shall monitor the open flare(s) to ensure that they are operated and maintained in conformance with their designs.
- F. The open flare(s) shall be operated at all times when landfill gasses may be vented to them. [40 CFR 60.18(e)]
- G. Reference Method 22 shall be used to determine the compliance of open flare(s) with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22. 40 CFR 60.18(f)(1)
- H. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18(f)(2)]
- I. The net heating value of the gas being combusted in the open flare(s) shall be calculated using the following equation: [40 CFR 60.18(f)(3)]

$$H_T = K \sum_{i=1}^n C_i H_i$$

Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for

determining the volume
corresponding to one mole is 20°C;

K = Constant,

$$1.740 \times 10^7 \left(\frac{1}{\text{ppm}} \right) \left(\frac{\text{gmole}}{\text{scm}} \right) \left(\frac{\text{MJ}}{\text{Kcal}} \right)$$

where the standard temperature for

$$\left(\frac{\text{g - mole}}{\text{scm}} \right) \text{ is } 20^\circ\text{C}$$

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 (Incorporated by reference as specified in §60.17); and

H_i = Net heat of combustion of sample component i, kcal/g mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

J. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18(f)(4)]

K. The maximum permitted velocity, V_{max}, for a flare shall be determined by the following equation. [40 CFR 60.18(f)(6)]

$$V_{\text{max}} = 8.706 + 0.7084 (H_T)$$

V_{max} = Maximum permitted velocity, m/sec

8.706 = Constant

0.7084 = Constant

H_T = The net heating value as determined
in accordance with 40 CFR
60.18(f)(3).

- b. Upon installation of a gas collection and control system used to comply with the provisions of 40 CFR 60.752(b)(2)(ii), the Permittee shall operate the collection system in accordance with the provisions of 40 CFR 60.753. These requirements include but are not limited to the following:
- i. Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for: [40 CFR 60.753(a)]
 - A. 5 years or more if active; or
 - B. 2 years or more if closed or at final grade;
 - ii. Operate the collection system with negative pressure at each wellhead except under the conditions shown 40 CFR 60.753(b);
 - iii. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 °C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. Nitrogen or oxygen levels shall be determined based upon the applicable methods and or procedures shown in 40 CFR 60.753(c)(1) or (2). [40 CFR 60.753(c)]
 - iv. Operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the Permittee shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. The Permittee may establish an alternative traversing pattern that ensures

equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. Areas with steep slopes or other dangerous areas may be excluded from the surface testing. [40 CFR 60.753(d)]

- v. Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; [40 CFR 60.753(e)] and
- vi. Operate the control or treatment system at all times when the collected gas is routed to the system. [40 CFR 60.753(f)]
- vii. If monitoring demonstrates that the operational requirements in 40 CFR 60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in 40 CFR 60.755(a)(3) through (5) or 40 CFR 60.755(c). If corrective actions are taken as specified in 40 CFR 60.755, the monitored exceedance is not a violation of the operational requirements in 40 CFR 60.753. [40 CFR 60.753(g)]

7.1.8 Testing Requirements

NSPS 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills:

- a. i. The Permittee shall calculate the NMOC emission rate, as required under 40 CFR 60.752(b) (See Condition 7.1.5(a)), using either the equation provided in 40 CFR 60.754(a)(1)(i) or the equation provided in 40 CFR 60.754(a)(1)(ii). Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in 40 CFR 60.754(a)(1)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in 40 CFR 60.754(a)(1)(ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for k, 170

cubic meters per mega-gram for L_0 , and 4,000 parts per million by volume as hexane for the C_{NMOC} . For landfills located in geographical areas with a thirty-year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorological site, the k value to be used is 0.02 per year. [40 CFR 60.754(a)(1)]

- ii. *Tier 1.* The Permittee shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year. [40 CFR 60.754(a)(2)]
 - A. If the NMOC emission rate calculated in 40 CFR 60.754(a)(1) is less than 50 megagrams per year, then the Permittee shall submit an emission rate report as provided in 40 CFR 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under 40 CFR 60.752(b)(1). [40 CFR 60.754(a)(2)(i)]
 - B. If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the Permittee shall either comply with 40 CFR 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in 60.754(a)(3). [40 CFR 60.754(a)(2)(ii)]
- iii. *Tier 2.* The Permittee shall determine the NMOC concentration using the following sampling procedure. The Permittee shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The Permittee shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C of Appendix A of 40 CFR Part 60 or Method 18 of Appendix A of 40 CFR Part 60. If using Method 18 of Appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). If composite sampling is used, equal volumes shall be taken from each

sample probe. If more than the required number of samples are taken, all samples shall be used in the analysis. The Permittee shall divide the NMOC concentration from Method 25C of Appendix A of 40 CFR Part 60 by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane. [40 CFR 60.754(a)(3)]

A. The Permittee shall recalculate the NMOC mass emission rate using the equations provided in 40 CFR 60.754(a)(1)(i) or (a)(1)(ii) and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in 40 CFR 60.754(a)(1). [40 CFR 60.754(a)(3)(i)]

B. If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the Permittee shall either comply with 40 CFR 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in 40 CFR 60.754(a)(4). [40 CFR 60.754(a)(3)(ii)]

C. If the resulting NMOC mass emission rate is less than 50 megagrams per year, the Permittee shall submit a periodic estimate of the emission rate report as provided in 40 CFR 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in 40 CFR 60.754. [40 CFR 60.754(a)(3)(iii)]

iv. *Tier 3.* The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of Appendix A of 40 CFR Part 60. The Permittee shall estimate the NMOC mass emission rate using equations in 40 CFR 60.754(a)(1)(i) or (a)(1)(ii) and using a site-specific methane generation rate constant k , and the site-specific NMOC concentration as determined in 40 CFR 60.754(a)(3) instead of the default values provided in 40 CFR 60.754 a)(1). The Permittee shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year. [40 CFR 60.754(a)(4)]

- A. If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the Permittee shall comply with 40 CFR 60.752(b)(2). [40 CFR 60.754(a)(4)(i)]
 - B. If the NMOC mass emission rate is less than 50 megagrams per year, then the Permittee shall submit a periodic emission rate report as provided in 40 CFR 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in 40 CFR 60.757(b)(1) using the equations in 40 CFR 60.754(a)(1) and using the site-specific methane generation rate constant and NMOC concentration obtained in 40 CFR 60.754(a)(3). The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations. [40 CFR 60.754(a)(4)(ii)]
- v. As per 40 CFR 60.750(b), the Permittee may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in 40 CFR 60.754(a)(3) and (a)(4) if the method has been approved by the USEPA. [40 CFR 60.754(a)(5)]
- b. After the installation of a collection and control system in compliance with 40 CFR 60.755, the Permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 40 CFR 60.752(b)(2)(v), using the equation in 40 CFR 60.754(b) (See below). [40 CFR 60.754(b)]:

$$M_{\text{NMOC}} = 1.89 \times 10^{-3} Q_{\text{LFG}} C_{\text{NMOC}}$$

Where:

M_{NMOC} = mass emission rate of NMOC, megagrams per year

Q_{LFG} = flow rate of landfill gas, cubic meters per minute

C_{NMOC} = NMOC concentration, parts per million by volume as hexane

- i. The flow rate of landfill gas, Q_{LFG} , shall be determined by measuring the total landfill gas flow rate at the common header pipe that leads to the control device using a gas flow measuring device calibrated according to the provisions of section 4 of Method 2E of Appendix A of 40 CFR Part 60. [40 CFR 60.754(b)(1)]
 - ii. The average NMOC concentration, C_{NMOC} , shall be determined by collecting and analyzing landfill gas sampled from the common header pipe before the gas moving or condensate removal equipment using the procedures in Method 25C or Method 18 of Appendix A of 40 CFR Part 60. If using Method 18 of Appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The Permittee shall divide the NMOC concentration, from Method 25C of Appendix A of 40 CFR Part 60, by six to convert from C_{NMOC} as carbon to C_{NMOC} as hexane. [40 CFR 60.754(b)(2)]
 - iii. The Permittee may use another method to determine landfill gas flow rate and NMOC concentration if the method has been approved by the USEPA. [40 CFR 60.754(b)(3)]
- c. When calculating emissions for PSD purposes, the Permittee of each MSW landfill subject to the provisions of 40 CFR 60 Subpart WWW shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 35 IAC 203 (40 CFR 51.166) or 40 CFR 52.21 using AP-42 or other approved measurement procedures. [40 CFR 60.754(c)]
 - d. For the performance test required in 40 CFR 60.752(b)(2)(iii)(B), Method 25C or Method 18 of Appendix A of 40 CFR Part 60 shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the USEPA or Illinois EPA as provided by 40 CFR 60.752(b)(2)(i)(B). If using Method 18 of Appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following

equation shall be used to calculate efficiency: [40 CFR 60.754(d)]

$$\text{Control Efficiency} = (\text{NMOC}_{\text{in}} - \text{NMOC}_{\text{out}})$$

Where:

NMOC_{in} = mass of NMOC entering control device

NMOC_{out} = mass of NMOC exiting control device

7.1.9 Inspection and Monitoring Requirements

a. General Requirements

- i. The Permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment: [35 Ill. Adm. Code 201.281]
 - A. A gas flow rate measuring device that shall record the flow to the control system(s) (e.g., the gas flow to utility (open) flare and/or engines) at least every 15 minutes;
 - B. 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:
 1. 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
 2. 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).
- ii. The Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

- b. Upon being subject to the control requirements of 40 CFR 60 Subpart WWW, the Permittee shall comply with the following as applicable:
 - i. The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR 60.753(d). [40 CFR 60.755(c)]
 - A. After installation of the collection system, the Permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph (d) of this section. [40 CFR 60.755(c)(1)]
 - B. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. [40 CFR 60.755(c)(2)]
 - C. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of Appendix A of 40 CFR Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. [40 CFR 60.755(c)(3)]
 - D. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(i) through (v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d). [40 CFR 60.755(c)(4)]
 - E. The Permittee shall implement a program to monitor for cover integrity and

implement cover repairs as necessary on a monthly basis. [40 CFR 60.755(c)(5)]

- ii. Each Permittee seeking to comply with the provisions in 40 CFR 60.755(c) shall comply with the instrumentation specifications and procedures for surface emission monitoring devices in 40 CFR 60.755(d). [40 CFR 60.755(d)]
- iii. The gas collection and control requirements of 40 CFR 60 Subpart WWW shall apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices. [40 CFR 60.755(e)]
- iv. Except as provided in 40 CFR 60.752(b)(2)(i)(B),
 - A. Each Permittee seeking to comply with 40 CFR 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and:
 - 1. Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60.755(a)(3); and [40 CFR 60.756(a)(1)]
 - 2. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5); and [40 CFR 60.756(a)(2)]
 - 3. Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5). [40 CFR 60.756(a)(3)]
 - B. Each Permittee seeking to comply with 40 CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment. [40 CFR 60.756(b)]

1. A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or ± 0.5 degrees Celsius, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts. [40 CFR 60.756(b)(1)]
2. A device that records flow to or bypass of the control device. The Permittee shall either: [40 CFR 60.756(b)(2)]
 - I. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or [40 CFR 60.756(b)(2)(i)]
 - II. Secure the bypass line valve 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 is maintained in the closed position and that the gas flow is not diverted through the bypass line. [40 CFR 60.756(b)(2)(ii)]
3. Each Permittee seeking to comply with 40 CFR 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment: [40 CFR 60.756(c)]
 - I. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous

presence of a flame. [40 CFR 60.756(c)(1)]

II. A device that records flow to or bypass of the flare. The Permittee shall either: [40 CFR 60.756(c)(2)]

a. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or [40 CFR 60.756(c)(2)(i)]

b. Secure the bypass line valve 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 is maintained in the closed position and that the gas flow is not diverted through the bypass line. [40 CFR 60.756(c)(2)(ii)]

4. If the Permittee seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor, the Permittee shall provide information satisfactory to the Illinois EPA or USEPA as provided in 40 CFR 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Illinois EPA or USEPA shall review the information and either approve it, or request that additional information be submitted. The Illinois EPA or USEPA may specify additional

appropriate monitoring procedures.
[40 CFR 60.756(d)]

5. If the Permittee seeks to install a collection system that does not meet the specifications in 40 CFR 60.759 or seeking to monitor alternative parameters to those required by 40 CFR 60.753 through 40 CFR 60.756, the Permittee shall provide information satisfactory to the Illinois EPA or USEPA as provided in 40 CFR 60.752(b)(2)(i)(B) and (C) describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Illinois EPA or USEPA may specify additional appropriate monitoring procedures. [40 CFR 60.756(e)]

6. If the Permittee seeks to demonstrate compliance with 40 CFR 60.755(c), the Permittee shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60.755(d). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring. [40 CFR 60.756(f)]

7.1.10 Recordkeeping Requirements

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

- a. The Permittee shall maintain and retain the following general records:

- i. Site-specific NMOC emission rate(s) and/or methane generation rate constant(s) (k) used to determine MSW landfill emissions;
 - ii. Records of the monthly and aggregate annual CO, VOM, PM, PM₁₀, NO_x, and SO₂ emissions from the affected MSW landfill operations and associated control system(s), calculated based on procedures in 7.1.13, with supporting calculations and documentation;
 - iii. Records of all determinations required under Condition 7.1.7(a) and 7.1.8 and any ancillary testing or monitoring results compiled by the Permittee; and
 - iv. Inspections:
 - A. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - B. The date of each inspection where it was determined by the Permittee that it was necessary to implement the control measures;
 - C. The dates the control measures were implemented; and
 - D. On a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.
- b. NSPS 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills:
- i. Except as provided in 40 CFR 60.752(b)(2)(i)(B), if the MSW landfill becomes subject to the provisions of 40 CFR 60.752(b), the Permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy

or electronic formats are acceptable. [40 CFR 60.758(a)]

ii. Except as provided in 40 CFR 60.752(b)(2)(i)(B), if the MSW landfill becomes subject to the control requirements under 60.752(b)(2), the Permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in 40 CFR 60.758(b)(1) through (b)(4) 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 control device vendor specifications shall be maintained until removal. [40 CFR 60.758(b)]

A. Records to demonstrate compliance with 40 CFR 60.752(b)(2)(ii) shall include: [40 CFR 60.758(b)(1)]

1. The maximum expected gas generation flow rate as calculated in 40 CFR 60.755(a)(1). The Permittee may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Illinois EPA or USEPA. [40 CFR 60.758(b)(1)(i)]

2. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 40 CFR 60.759(a)(1). [40 CFR 60.758(b)(1)(ii)]

B. Records to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) through the use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts shall include: [40 CFR 60.758(b)(2)]

1. The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test. [40 CFR 60.758(b)(2)(i)]

2. The percent reduction of NMOC determined as specified in 40 CFR

60.752(b)(2)(iii)(B) achieved by the control device. [40 CFR 60.758(b)(2)(ii)]

C. Records to demonstrate compliance with 40 CFR 60.752 (b)(2)(iii)(B)(1) through use of a boiler or process heater of any size shall include: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period of the performance testing. [40 CFR 60.758(b)(3)]

D. Records to demonstrate compliance with compliance with 40 CFR 60.752(b)(2)(iii)(A) through use of an open flare shall include: the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent. [40 CFR 60.758(b)(4)]

iii. Except as provided in 40 CFR 60.752(b)(2)(i)(B), if the MSW landfill becomes subject to the control requirements under 40 CFR 60 Subpart WWW, the Permittee shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 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. [40 CFR 60.758(c)]

A. The following constitute exceedances that shall be recorded and reported under 40 CFR 60.757(f): [40 CFR 60.758(c)(1)]

1. For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater,

all 3-hour periods of operation during which the average combustion temperature was more than 28 °C below the average combustion temperature during the most recent performance test at which compliance with 40 CFR 60.752(b)(2)(iii) was determined. [40 CFR 60.758(c)(1)(i)]

2. For boilers or process heaters, whenever there is a change in the location at which the vent stream is introduced into the flame zone as required under paragraph (b)(3) of this section. [40 CFR 60.758(c)(1)(ii)]

B. If the MSW landfill becomes subject to the control requirements under 40 CFR 60 Subpart WWW, the Permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the 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)]

C. If the MSW landfill becomes subject to the control requirements under 40 CFR 60 Subpart WWW and the Permittee uses a boiler or process heater with a design heat input capacity of 44 megawatts or greater to comply with 40 CFR 60.752(b)(2)(iii), the Permittee shall keep an up-to-date, readily accessible record of all periods of operation of the boiler or process heater. (Examples of such records could include records of steam use, fuel use, or monitoring data collected pursuant to other Illinois EPA or USEPA requirements.) [40 CFR 60.758(c)(3)]

D. If the MSW landfill becomes subject to the control requirements under 40 CFR 60 Subpart WWW and the Permittee seeks to comply through the use of an open flare, the Permittee shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c), and up-

to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent. [40 CFR 60.758(c)(4)]

- iv. Except as provided in 40 CFR 60.752(b)(2)(i)(B), if the MSW landfill becomes subject to the control requirements under 40 CFR 60 Subpart WWW, the Permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. These shall include: [40 CFR 60.758(d)]
 - A. Up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b). [40 CFR 60.758(d)(1)]
 - B. Readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii). [40 CFR 60.758(d)(2)]
- v. Except as provided in 40 CFR 60.752(b)(2)(i)(B), if the MSW landfill becomes subject to the control requirements under 40 CFR 60 Subpart WWW, the Permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. [40 CFR 60.758(e)]
- b. NESHAP 40 CFR 61 Subpart M: Handling Procedures and Control Measures for the Disposal of ACWM
Active Waste Disposal Sites [40 CFR 61.154]:
 - i. For all asbestos-containing waste material received, the Permittee shall: [40 CFR 61.154(e)]

- A. Maintain waste shipment records, using a form similar to that shown in Figure 4 of 40 CFR 61 Subpart M, and include the following information: [40 CFR 61.154(e)(1)]
 - 1. The name, address, and telephone number of the waste generator. [40 CFR 61.154(e)(1)(i)]
 - 2. The name, address, and telephone number of the transporter(s). [40 CFR 61.154(e)(1)(ii)]
 - 3. The quantity of the asbestos-containing waste material in cubic meters (cubic yards). [40 CFR 61.154(e)(1)(iii)]
 - 4. The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. [40 CFR 61.154(e)(1)(iv)]
 - 5. The date of the receipt. [40 CFR 61.154(e)(1)(v)]
- B. Maintain, until closure, records of the location, depth and area, and quantity in cubic meters (cubic yards) of asbestos-containing waste material and daily cover applied to the ACWM within the disposal site on a map or diagram of the disposal area. [40 CFR 61.154(f)]

7.1.11 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected 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. Report of any violation of the requirements of 35 IAC 218 Subpart RR by sending a copy of any record showing a violation to the Illinois EPA, Compliance Section, within 30 days following the occurrence of the violation [35 IAC 218.991(a)(3)].

ii. Report of any deviation from the applicable permit requirements of shall be reported to the Illinois EPA within 30 days of such occurrence. The report shall include the identity of the requirements for which a deviation occurred, a description of the deviation, its probable cause, and any corrective actions or preventive measures taken [39.5(7)(f)(ii) of the Act].

b. NSPS 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills:

Except as provided in 40 CFR 60.752(b)(2)(i)(B),

i. The Permittee shall submit an NMOC emission rate report to the Illinois EPA initially and annually thereafter, except as provided for in 40 CFR 60.757(b)(1)(ii) or (b)(3) (See below). The Illinois EPA may request such additional information as may be necessary to verify the reported NMOC emission rate. [40 CFR 60.757(b)]

A. The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 60.754(a) or (b), as applicable. [40 CFR 60.757(b)(1)]

1. The NMOC emission rate reports shall be submitted as part of the annually emission report, as required by 35 IAC Part 254 (See Condition 9.7, except as provided for in 60.757(b)(1)(ii) and (b)(3). [40 CFR 60.757(b)(1)(i)]

2. If the estimated NMOC emission rate as reported in the annual report to the Illinois EPA is less than 50 megagrams per year in each of the next 5 consecutive years, the Permittee may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and

calculations upon which this estimate is based shall be provided to the Illinois EPA. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Illinois EPA. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate. [40 CFR 60.757(b)(1)(ii)]

B. The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. [40 CFR 60.757(b)(2)]

C. The Permittee is exempted from the requirements of 40 CFR 60.757(b)(1) and (2), after the installation of a collection and control system in compliance with 40 CFR 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with 40 CFR 40 CFR 60.753 and 60.755. [40 CFR 60.757(b)(3)]

ii. Upon becoming subject to the provisions of 40 CFR 60.752(b)(2)(i), the Permittee shall submit a collection and control system design plan to the Illinois EPA, Division of Air Pollution Control, Permit Section within 1 year of the first report required under 40 CFR 60.757(b) in which the emission rate equals or exceeds 50 megagrams per year, except as follows: [40 CFR 60.757(c)]

A. If the Permittee elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in 40 CFR 60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC

emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year. [40 CFR 60.757(c)(1)]

- B. If the Permittee elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in 40 CFR 60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of 40 CFR 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Illinois EPA, Division of Air Pollution Control, Permit Section within 1 year of the first calculated emission rate exceeding 50 megagrams per year. [40 CFR 60.757(c)(2)]

The collection and control system design plan shall contain the information required under 40 CFR 40 CFR 60.752(b)(2) and such other additional information outlined in the USEPA guidance document *Municipal Solid Waste Landfills, Volume 1: Summary of the Requirements for New Source Performance Standards and Emission Guidelines for Municipal Solid Waste Landfills* (See <http://www.epa.gov/ttn/oarpg>). The collection and control system design plan shall be submitted as part of a construction permit application for a CAAPP source and a request for "Administrative Amendment" or "Minor Permit Modification" of the CAAPP permit (See Attachment 3 (Section 10.3) of this permit).

- iii. The Permittee shall submit a closure report to the Illinois EPA, Compliance Section within 30 days of waste acceptance cessation. The Illinois EPA, Compliance Section may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been

submitted to the Illinois EPA, Compliance Section no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4). [40 CFR 60.757(d)]

- c. NESHAP 40 CFR 61 Subpart M: Handling Procedures and Control Measures for the Disposal of ACWM
 - i. Report in writing to the Illinois EPA, Compliance Section and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. A copy of the waste shipment records, required under 40 CFR 61.154(e)(1) (See Condition 7.1.10(b)(i)), shall be submitted along with the report. [40 CFR 61.154(e)(1)(iv)]
 - ii. As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator. [40 CFR 61.154(e)(2)]
 - iii. Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the Illinois EPA, Compliance Section and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record). The report shall describe the discrepancy and attempts to reconcile it, and it shall include copy of the waste shipment records, required under 40 CFR 61.154(e)(1) (See Condition 7.1.10(b)(i)). [40 CFR 61.154(e)(3)]
 - iv. Submit to the Illinois EPA, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities. [40 CFR 61.154(h)]
 - v. Notify the Illinois EPA in writing at least 45 days prior to excavating or otherwise

disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Illinois EPA at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice: [40 CFR 61.151(d) or 40 CFR 61.154(j)]

- A. Scheduled starting and completion dates.
- B. Reason for disturbing the waste.
- C. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Illinois EPA or USEPA may require changes in the emission control procedures to be used.
- D. Location of any temporary storage site and the final disposal site.

7.1.12 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected MSW landfill without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

- a. The Permittee may install gas collection wells venting directly to "passive" flares as needed for safety purposes i.e., the reduction of methane so as to prevent the migration of landfill gas both onsite and offsite, etc..
- b. The total amount of gas handled by any passive landfill gas collection and control system(s) shall not exceed 5.0 million cubic feet per year.
- c. Any flares installed under this provision shall comply with the operational and testing requirements of 40 CFR 60.18.

- d. As a consequence of the above condition this permit is issued based on the emissions from any passive landfill gas collection and control system(s) not constituting a new major source or major modification subject to federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21.
- e. If applicable, the passive landfill gas collection and control system(s) must be incorporated into the landfill gas collection and control design plan referenced in Condition 7.1.11(b)(ii) and in 40 CFR 60.752.

7.1.13 Compliance Procedures

Compliance with the limits in Conditions 5.5.1 and 7.1.6 shall be based on the recordkeeping requirements in Condition 7.1.10 and the emission factors and formulas listed below:

- a. For the purpose of estimating controlled methane, NMOC, SO₂ and speciated emissions can be calculated from the MSW landfill operating data and the USEPA Landfill Gas Emissions Model (See <http://www.epa.gov/ttn/chief> and AP-42, Chapter 2.4) and the site specific NMOC concentration(s) reported to Illinois EPA under Condition 7.1.11(b). At the time of issuance of this permit, the site-specific NMOC concentration was reported to be 88.2 ppmv for the River Bend Prairie landfill site and 534.4 ppmv for the Land and Lakes #1 and #2 landfill site.
- b. Flare Emissions shall be calculated based upon the following emission factors and landfill gas flow rate records:

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Derived From</u>
CO	0.06 lb/mmBtu	1
NO _x	0.30 lb/mmBtu	1
PM ₁₀	0.001 lb/hr/dscfm	2

Notes

- 1 Emission factor provided by the flare manufacturer
- 2 Emissions factor based upon AP-42 and the maximum gas flow rate provided by the flare manufacturer;

These are special calculated emission factors for this landfill controlled by a flare.

CO and NO_x

Flare Emissions (lb) = (Landfill Gas Vented to the Flare, dscfm) x (The Appropriate Emission Factor, lb/mmBtu) x 60 minutes/hour x Net Heating Content of the Landfill Gas, Btu/scf)

Net Heating Content of the Landfill Gas shall be based upon the determination required under Condition 7.1.7(a)

PM₁₀

Flare Emissions (lb) = (Landfill Gas Vented to the Flare, dscfm) x (The Appropriate Emission Factor, lb/hr/dscfm)

c. Landfill Operations PM & PM₁₀ emissions shall be calculated based upon the following emission factors and operating data:

- i. For the purpose of estimating fugitive PM emissions from the paved roadways at the source, the emission factors and formulas in Sections 13.2.1 of AP-42, Volume I, Fifth Edition, Supplement D, October, 1997 are acceptable.
- ii. For the purpose of estimating fugitive PM emissions from the unpaved roadways at the source, the emission factors and formulas in Sections 13.2.2 of AP-42, Volume I, Fifth Edition, Supplement E, September, 1998 are acceptable.

c. Landfill Operations PM & PM₁₀ emissions shall be calculated based upon the following emission factors and operating data:

- i. For the purpose of estimating fugitive PM and PM₁₀ emissions from the paved roadways at the source, the emission factors and formulas in Sections 13.2.1 of AP-42, Volume I, Fifth Edition, Supplement D, October, 1997 are acceptable.
- ii. For the purpose of estimating fugitive PM and PM₁₀ emissions from the unpaved roadways at the source, the emission factors and formulas in Sections 13.2.2 of AP-42, Volume I, Fifth Edition, Supplement E, September, 1998 are acceptable.
- iii. For the purpose of estimating fugitive PM and PM₁₀ emissions from the stockpile and cover

activities at the source, the emission factors and formulas in Sections 13.2.4 of AP-42, Volume I, Fifth Edition, are acceptable. Annual emissions shall be determined based upon the total of daily covered used. The amount of daily cover used shall be calculated as follows:

$$\text{Cover Used per day (tons/day)} = \frac{[\text{Waste Disposal Rate (tpd)} \times \text{Soil Cover Density (lb/cy)}]}{[\text{Refuse density (lb/cy)} \times \text{Percent Soil Volume}]}$$

Where:

Waste Disposal Rate	Actual daily waste disposal rate determined through weigh house receipts. tpd)
Soil Cover Density	Site Specific or default value of 2600 (lb/cy)
Refuse density	Site Specific or default value of 1100 (lb/cy)
Percent Soil Volume	Site Specific or default value of 15%

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 October 26, 2001 (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].

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

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

- a. The changes do not violate applicable requirements;

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

8.5 Testing Procedures

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

8.6 Reporting Requirements

8.6.1 Monitoring Reports

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

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

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

8.6.2 Test Notifications

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

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

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

8.6.3 Test Reports

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

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

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA - Air Compliance Section
Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - ii. Illinois EPA - Air Regional Field Office
Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

iii. Illinois EPA - Air Permit Section

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

iv. USEPA Region 5 - Air Branch

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

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

8.7 Obligation to Comply with Title I Requirements

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

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

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

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

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

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

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

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

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

9.4 Obligation to Comply with Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

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

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

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

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

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

9.9 Certification

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

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

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

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

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

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

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

9.12.2 Reopening and Revision

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

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

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

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

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

9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

10.1 Attachment 1 Summary of MSW Landfill

Emission Unit	Description	Emission Control Equipment
MSW Landfill		Gas to Energy Facility ¹ with Backup Utility (Open) Flare ²
	<p style="text-align: center;"><u>Active Area</u></p> <p style="text-align: center;"><u>River Bend Prairie</u></p> <p style="text-align: center;"><u>Commenced Waste Operations</u></p> <p style="text-align: center;">1997</p> <p style="text-align: center;"><u>Last Modification:</u></p> <p style="text-align: center;">October 21, 1998</p>	
	<p style="text-align: center;"><u>Inactive Area</u></p> <p style="text-align: center;"><u>No. 1 and 2</u></p> <p style="text-align: center;"><u>Commenced Waste Operations</u></p> <p style="text-align: center;">1940's</p> <p style="text-align: center;"><u>Waste Operations Initially Permitted</u></p> <p style="text-align: center;">June 20, 1975 [BOL Permit 1975-46-DE]</p> <p style="text-align: center;"><u>Ceased Accepting Waste</u></p> <p style="text-align: center;">July 16, 1993</p>	
Fugitive PM ₁₀ Emissions	<u>Fugitive Dust</u>	Dust Control Program

1 Adjacent gas to energy plant owned and operated by Zapco Energy Tactics Corp. (031069ABX).

2 Backup utility (open) flare owned and operated by Land and Lakes Co.

10.2 Attachment 2 Example Certification by a Responsible Official

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

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.3 Attachment 3 Guidance on Revising This Permit

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

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

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

1. Administrative Permit Amendment
 - Corrects typographical errors;
 - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - Requires more frequent monitoring or reporting by the Permittee;
 - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA. This shall be handled by completing form 272-CAAPP, REQUEST FOR OWNERSHIP CHANGE FOR CAAPP PERMIT; or
 - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits.
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;
- Are not required to be processed as a significant permit modification; and
- Modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches.

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, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT 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.

10.5 Attachment 5 Guidance on Renewing This Permit

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

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

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

as existing information is being incorporated by reference.

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

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

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

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

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

Mail renewal applications to:

Illinois Environmental Protection Agency
Division of Air Pollution Control

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Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506