FINAL DRAFT/PROPOSED CAAPP PERMIT
DeKalb County Landfill
I.D. No.: 037802AAI
Application No.: 99100086
March 5, 2002

217/782-2113

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT
and
TITLE I PERMIT[1]

PERMITTEE

DeKalb County Landfill
Attn: Bernadette Sarmiento
18370 Somonauk Road
DeKalb, Illinois 60115

Application No.: 99100086 I.D. No.: 037802AAI
Applicant's Designation: Title V Date Received: October 25, 1999
Operation of: Municipal Solid Waste Landfill
Date Issued: TO BE DETERMINED Expiration Date[2]: DATE
Source Location: 18370 Somonauk Road, DeKalb, DeKalb County, IL 60115
Responsible Official: Dale Hoekstra, Division Vice President

This permit is hereby granted to the above-designated Permittee to operate a Municipal Solid Waste 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 Michael Haggitt at 217/782-2113.

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

DES:MVH:psj

cc: Illinois EPA, FOS, Region 2
USEPA

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

[2] Except as provided in Condition 8.7 of this permit.

TABLE OF CONTENTS

		PAGE
1.0	SOURCE IDENTIFICATION	4
	1.1 Source	
	1.2 Owner/Parent Company	
	1.3 Operator	
	1.4 General Source Description	
2.0	LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	5
3.0	INSIGNIFICANT ACTIVITIES	7
	3.1 Identification of Insignificant Activities	
	3.2 Compliance with Applicable Requirements	
	3.3 Addition of Insignificant Activities	
4.0	SIGNIFICANT EMISSION UNITS AT THIS SOURCE	9
5.0	OVERALL SOURCE CONDITIONS	10
	5.1 Source Description	
	5.2 Applicable Regulations	
	5.3 Non-Applicability of Regulations of Concern	
	5.4 Source-Wide Operational and Production Limits and Work Practices	
	5.5 Source-Wide Emission Limitations	
	5.6 General Recordkeeping Requirements	
	5.7 General Reporting Requirements	
	5.8 General Operational Flexibility/Anticipated Operating Scenarios	
	5.9 General Compliance Procedures	
6.0	[NOT APPLICABLE TO THIS PERMIT]	17
7.0	UNIT SPECIFIC CONDITIONS	18
	7.1 MSW Landfill Control - Flare	
	7.2 Gasoline Tank	
8.0	GENERAL PERMIT CONDITIONS	68
	8.1 Permit Shield	
	8.2 Applicability of Title IV Requirements	
	8.3 Emissions Trading Programs	
	8.4 Operational Flexibility/Anticipated Operating Scenarios	

PAGE

8.5 Testing Procedures
8.6 Reporting Requirements
8.7 Obligation to Comply with Title I Requirements

9.0 STANDARD PERMIT CONDITIONS 74

9.1 Effect of Permit
9.2 General Obligations of Permittee
9.3 Obligation to Allow Illinois EPA Surveillance
9.4 Obligation to Comply with Other Requirements
9.5 Liability
9.6 Recordkeeping
9.7 Annual Emissions Report
9.8 Requirements for Compliance Certification
9.9 Certification
9.10 Defense to Enforcement Actions
9.11 Permanent Shutdown
9.12 Reopening And Reissuing Permit For Cause
9.13 Severability Clause
9.14 Permit Expiration and Renewal

10.0 ATTACHMENTS

10.1 Attachment 1 - Example Certification by a Responsible Official 1-1
10.2 Attachment 2 – Guidance on Revising This Permit 2-1
10.3 Attachment 3 - Form 199-CAAPP, Application For Construction Permit (For CAAPP Sources Only) 3-1
10.4 Attachment 4 – Guidance on Renewing This Permit 4-1

1.0 SOURCE IDENTIFICATION

1.1 Source

DeKalb County Landfill
18370 Somonauk Road
DeKalb, Illinois 60115
815/758-6906

I.D. No.: 037802AAI
Standard Industrial Classification: 4953, Refuse Systems

1.2 Owner/Parent Company

Waste Management of Illinois, Inc.
18370 Somonauk Road
DeKalb, Illinois 60115

1.3 Operator

Waste Management of Illinois, Inc.
18370 Somonauk Road
DeKalb, Illinois 60115

Dale Hoekstra
630/232-7664

1.4 General Source Description

The DeKalb County Landfill is located at 18370 Somonauk Road, near DeKalb. The source is a Municipal Solid Waste Landfill. A MSW landfill is defined as an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of RCRA Subtitle D wastes (40 CFR 257.2) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. In addition, the source operates a compost facility located on the closed portion of the landfill and a soil vapor extraction system.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
ACMA	Alternative Compliance Market Account
ACWM	Asbestos-Containing Waste Material
Agency	Illinois EPA
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
BOA	Bureau of Air
BOL	Bureau of Land
Btu	British thermal unit
C_{NMOC}	Average NMOC Concentration
°C	Degrees Celsius or centigrade
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emission Reduction Market System
°F	Degrees Fahrenheit
ft^3	cubic feet
g	gram
gal	gallons
HAP	Hazardous Air Pollutant
HCl	Hydrochloric acid
HDPE	High Density Polyethylene
Hg	Mercury
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
IEPA	Illinois Environmental Protection Agency
°K	Kelvin
kcal	Kilocalorie
kg	kilograms
kPa	kilopascals
kW	kilowatts
L_o	Methane generation potential
l	liters
lb	pound

LEL	Lower Explosive Limit
Mo	Month
Mg	Megagram
MJ	Megajoule
m^3	Cubic meters
MBtu	Million British thermal units
mm	millimeters
mmBtu	Million British thermal units
mmscf	Million standard cubic feet
MW	Megawatt
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMOC	Nonmethane Organic Compound
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
ppmv	parts per million volume
PSD	Prevention of Significant Deterioration
PVC	Polyvinyl Chloride
Q_{LFG}	Flow rate of landfill gas
RCRA	Resource Conservation and Recovery Act
RMP	Risk Management Plan
scf	standard cubic feet
scm	standard cubic meters
SIP	State Implemented 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
V_{max}	Maximum velocity
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material
yd^3	Cubic yard
yr	Year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

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

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

None

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

Composting of Landscape Waste
Soil Vapor Extraction Unit

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:

Direct combustion units designed and used for comfort heating purposes and fuel combustion emission units as follows: (A) Units with a rated heat input capacity of less than 2.5 MBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 MBtu/hr that fire only oil or oil in combination with only natural gas, propane, or liquefied petroleum gas; and (C) Units with a rated heat input capacity of less than 200,000 Btu/hr which never burn refuse, or treated or chemically contaminated wood [35 IAC 201.210(a)(4)].

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

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

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

3.2 Compliance with Applicable Requirements

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

3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit’s process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).

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

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

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
MSW Landfill	Active Municipal Solid Waste Landfill	1974	Utility Flare
	Lateral Expansion Area	July 1998	
	Inactive MSW Landfill Site	Closed: 1974	
Gasoline Tank	300 gallon above ground gasoline storage tank	1993	Submerged Loading
Fugitive PM Emissions	Paved and Unpaved Roadways	-	None

Note: The lateral expansion of the active MSW landfill was approved in 1989 by BOL Permit number 1989-159-SP. However construction of the lateral expansion did not commence until July 1998.

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

5.1.2 This permit is issued based on the source not being a major source of HAPs.

5.2 Applicable Regulations

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

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

a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

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

5.2.3 Ozone Depleting Substances

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

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

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan

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

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

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

5.2.5 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.

b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or

demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

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

b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.

c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.

d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

i. Illinois EPA, Compliance Section; and

ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or

iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

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

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	0.85
Sulfur Dioxide (SO_2)	3.50
Particulate Matter (PM)	18.33
Nitrogen Oxides (NO_x)	4.77
HAP, not included in VOM or PM	---
TOTAL	27.45

5.5.2 Emissions of Hazardous Air Pollutants

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

5.5.3 Other Source-Wide Emission Limitations

a. Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However,

there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

b. The volume of waste deposited in the MSW landfill shall not exceed the maximum design capacity set in the latest Developmental Permit(s), issued by the Illinois EPA's Bureau of Land (BOL), for the source. Based upon the BOL Permit No. 1996-247-LFM (BOL ID No. 0378020003), issued December 10, 1996 and the capacity shown in the capacity of the landfill shall not exceed 5.66 million Mg, which is the basis for determining potential emissions for the landfill.

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 Fugitive Emissions from Road Dust

a. The Permittee shall maintain a record of the maximum aggregate annual emissions of fugitive PM from the traffic areas at the source (i.e., road dust) estimated based on the applicable emission factors and formulas specified by Condition 5.9(c), with supporting calculations, so as to demonstrate compliance with the limits in Condition 5.5.

b. This record shall be updated upon construction of additional roadways or parking areas or other permanent change to the source that alters the maximum aggregate emissions of PM.

c. The Permittee shall keep these written procedures shown in Condition 5.4 on record for the life of the affected source, to be made available for inspection, upon request, by the Illinois EPA. If the fugitive particulate matter evaluation plan is revised, the Permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available

for inspection, upon request, by the Illinois EPA, for a period of 5 years after each revision to the plan.

5.6.3 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

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

5.7.2 Annual Emissions Report

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

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating PM Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and

Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.

a. 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.

b. 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.

6.0 [NOT APPLICABLE TO THIS PERMIT]

7.0 UNIT SPECIFIC CONDITIONS

7.1 MSW Landfill

7.1.1 Description

The MSW landfill consists of an active area, a lateral expansion area and an inactive site. All sites have active gas collection systems that supply landfill gas to a utility flare for combustion.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
MSW Landfill	Active Municipal Solid Waste Landfill	Utility Flare
	Lateral Expansion Area	
	Inactive MSW Landfill Site	

7.1.3 Applicability Provisions and Applicable Regulations

a. The "affected landfill" for the purpose of these unit-specific conditions, is the MSW Landfill described in Conditions 7.1.1 and 7.1.2.

b. The affected landfill is subject to the emission limits identified in Condition 5.2.2.

c. The affected landfill is subject to 40 CFR 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills, because the landfill commenced construction, reconstruction or modification or began accepting waste on or after May 30, 1991 [40 CFR 60.750 (a)].

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

The Permittee shall either comply with Condition 7.1.3(c)(ii) or calculate an NMOC emission rate for the landfill using the procedures specified in Condition 7.1.7. The NMOC emission rate shall be recalculated annually, except as provided in Condition 7.1.10(b)(2). [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) (Below).

A. Submit an annual emission report to the Administrator, except as provided for in Condition 7.1.10(b)(i)(A)(2); and [40 CFR 60.752(b)(1)(i)]

B. Recalculate the NMOC emission rate annually using the procedures specified in Condition 7.1.7(a) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed. [40 CFR 60.752(b)(1)(ii)]

C. If the NMOC emission rate, upon recalculation required in Condition 7.1.3(c)(i)(B), is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system in compliance with Condition 7.1.3(c)(ii). [40 CFR 60.752(b)(1)(ii)(A)]

D. If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided for in Condition 7.1.10(b)(iii). [40 CFR 60.752(b)(1)(ii)(B)]

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 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)]

d. Upon installation of a gas collection and control system used to comply with the provisions of Condition 7.1.3(c)(ii)(B), the Permittee shall operate the collection system in accordance with the provisions of 40 CFR 60.753 (Below).

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 [40 CFR 60.753(a)(1)]

B. 2 years or more if closed or at final grade; [40 CFR 60.753(a)(2)]

ii. Operate the collection system with negative pressure at each wellhead except under the conditions shown 40 CFR 60.753(b);

A. A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.757(f)(1); [40 CFR 60.753(b)(1)]

B. Use of a geomembrane or synthetic cover. The owner or operator shall develop acceptable pressure limits in the design plan; [40 CFR 60.753(b)(2)]

C. A decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Administrator; [40 CFR 60.753(b)(3)]

iii. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 ºC 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). (Below) [40 CFR 60.753(c)]

A. The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by Condition 7.1.3(c)(ii)(A). [40 CFR 60.753(c)(1)]

B. Unless an alternative test method is established as allowed by Condition 7.1.3(c)(ii)(A), the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that: [40 CFR 60.753(c)(2)]

1. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span. [40 CFR 60.753(c)(2)(i)]

2. A data recorder is not required; [40 CFR 60.753(c)(2)(ii)]

3. Only two calibration gases are required, a zero and span, and ambient air may be used as the span; [40 CFR 60.753(c)(2)(iii)]

4. A calibration error check is not required; [40 CFR 60.753(c)(2)(iv)]

5. The allowable sample bias, zero drift, and calibration drift are ±10 percent. [40 CFR 60.753(c)(2)(v)]

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 Condition 7.1.3(c)(ii)(C). 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 Condition 7.1.3(e)(ii), (iii) or (iv) are not met, corrective action shall be taken as specified in Condition 7.1.12(d)(iii), (iv) and (v) or Condition 7.1.8(b). If corrective actions are taken as specified in Condition 7.1.12(d), the monitored exceedance is not a violation of the operational requirements in Condition 7.1.3(e). [40 CFR 60.753(g)]

e. 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]

The affected landfill meets the definition of an active 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 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.

ii. 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)].

f. The affected landfill's flares are subject to 40 CFR 60.18 - General control device requirements [40 CFR 60.18(a)].

NSPS 40 CFR Subpart A 60.18 - Flares:

The open flare(s) shall be designed and operated in accordance with 40 CFR 60.18. This includes the following:

i. 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)]

ii. 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)]

iii. 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)]

iv. 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)]

v. The Permittee shall monitor the open flare(s) to ensure that they are operated and maintained in conformance with their designs.

vi. The open flare(s) shall be operated at all times when landfill gasses may be vented to them. [40 CFR 60.18(e)]

vii. 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)]

viii. 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)]

ix. 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,

$$1.740\times10^{7}\left(\frac{1}{ppm}\right)\left(\frac{g\text{-}mole}{scm}\right)\left(\frac{MJ}{Kcal}\right)$$

where the standard temperature for $\left(\frac{g\text{-}mole}{scm}\right)$ is $20^{\circ}C$

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 40 CFR 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 40 CFR 60.17) if published values are not available or cannot be calculated.

xi. 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)]

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

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

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).

7.1.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected landfill not being subject to 35 IAC 220, Nonmethane Organic Compounds because the affected landfill is subject to 40 CFR 60 Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills, pursuant to 35 IAC 220.200(b).

b. This permit is issued based on the affected landfill not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected landfill is subject to an emission limitation or standard for which this CAAPP permit specifies a continuous compliance determination method, pursuant to 40 CFR 64.2(b)(1)(vi).

c. This permit is issued based on the affected landfill not being 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.

7.1.5 Operational and Production Work Practices

a. 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 ACWM 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)]

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)]

7.1.6 Emission Limitations

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

a. Emissions from the affected landfills flare shall not exceed the following limits:

Pollutant	Emissions	
	Lbs/hr	Ton/yr
PM	1.08	4.73
CO	2.44	10.64
NO_x	1.09	4.78
SO_2	0.80	3.50
VOM	0.0891	0.39

The above limitations are based on the affected landfills flare burning a maximum of 648,000 dry standard cubic feed per day and operating 365 days per year [T1R].

The above limitations contain revisions to previously issued Permit 93080060. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification

pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, the pound per million dry standard cubic feet to landfill gas burned was converted to a pound per hour rate, assuming a maximum flow of 450 scfm. This was done for simplifying recordkeeping and compliance by assuming maximum flow rate whenever the flare is operating [T1R].

Compliance with this annual limit shall be determined on a monthly basis by the sum of the last 12 months of the landfill gas flared and the above listed emission factors [T1R].

b. Uncontrolled emissions from the MSW landfill, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations:

Pollutant	Emissions (Tons/yr)
VOM	0.44

This emission limit is based on the highest expected gas production rate for the life of the landfill, the minimum active gas collection system's efficiency and a measured NMOC concentration of 541 ppmv as hexane, as indicated in the application. [T1N]

The above limitations are being established in this permit pursuant to Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the VOM emissions from the affected landfill below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application [T1N].

7.1.7 Testing Requirements

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

a. The Permittee shall calculate the NMOC emission rate, as required under Condition 7.1.3(c), using either the equation provided in Condition 7.1.7(a)(i) or the equation provided in Condition 7.1.7(a)(ii). Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in Condition 7.1.7(a)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in Condition 7.1.7(a)(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_O, 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)]

i. The following equation shall be used if the actual year-to-year solid waste acceptance rate is known [40 CFR 60.754(a)(1)(i)].

$$M_{NMOC} = \sum_{i=1}^{n} 2kL_o M_i (e^{-kt_i})(C_{NMOC})(3.6\times10^{-9})$$

where,

M_{NMOC} = Total NMOC emission rate from the landfill, megagrams per year

k = methane generation rate constant, $year^{-1}$

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the ith section, megagrams

t_i = age of the ith section, years

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

3.6×10^{-9} = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if documentation of the nature and amount of such wastes is maintained. [40 CFR 60.754(a)(1)(i)]

ii. The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown. [40 CFR 60.754(a)(1)(ii)]

$$M_{NMOC} = 2L_o R(e^{-kc} - e^{-kt})(C_{NMOC})(3.6\times10^{-9})$$

Where:

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

L_o = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, $year^{-1}$

t = age of landfill, years

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

c = time since closure, years; for active landfill c = O and $e^{-kc} = 1$

3.6×10^{-9} = conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value of R, if documentation of the nature and amount of such wastes is maintained. [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 Condition 7.1.7(a) is less than 50 megagrams per year, then the Permittee shall submit an emission rate report as provided in Condition 7.1.10(b)(i)(A), and shall recalculate the NMOC mass emission rate annually as required under Condition 7.1.10(b)(i)(A)(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 Condition 7.1.3(c)(ii), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in *Tier 2*. [40 CFR 60.754(a)(2)(ii)]

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 *Tier 1* and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in Condition 7.1.7(a). [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 Condition 7.1.3(c), 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 *Tier 3*. [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 Condition 7.1.10(b)(i)(A) 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)]

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 Condition 7.1.7(a)(i) or (ii) and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in *Tier 2* instead of the default values provided in Condition 7.1.7(a). 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 Condition 7.1.3(c)(ii). [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 Condition 7.1.10(b)(i)(A) and shall recalculate the NMOC mass emission rate annually, as provided in Condition 7.1.10(b)(i)(A)(1) using the equations in Condition 7.1.7(a) and using the site-specific methane generation rate constant and NMOC concentration obtained in *Tier 2*. 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)]

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 *Tier 2* and *Tier 3* 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 Condition 7.1.8(b), 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)]:

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

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)]

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

where,

$NMOC_{in}$ = mass of NMOC entering control device

$NMOC_{out}$ = mass of NMOC exiting control device

7.1.8 Monitoring Requirements

a. General Requirements

i. The Permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment, pursuant to 35 IAC 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 turbines) at least every 15 minutes [35 IAC 201.281];

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 [35 IAC 201.281]:

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 Condition 7.1.3(e)(iv). [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 Condition 7.1.9(b)(vi) 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 Condition 7.1.8(b) shall comply with the instrumentation specifications and procedures for surface emission monitoring devices in 40 CFR 60.755(d) (See below). [40 CFR 60.755(d)]

A. The portable analyzer shall meet the instrument specifications provided in section 3 of Method 21 of appendix A of this part, except that "methane" shall replace all references to VOC. [40 CFR 60.755(d)(1)]

B. The calibration gas shall be methane, diluted to a nominal concentration of 500 parts per million in air. [40 CFR 60.755(d)(2)]

C. To meet the performance evaluation requirements in section 3.1.3 of Method 21 of appendix A of this part, the instrument evaluation procedures of section 4.4 of Method 21 of appendix A of this part shall be used. [40 CFR 60.755(d)(3)]

D. The calibration procedures provided in section 4.2 of Method 21 of appendix A of this part shall be followed immediately

before commencing a surface monitoring survey. [40 CFR 60.755(d)(4)]

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: [40 CFR 60.756(a)]

1. Measure the gauge pressure in the gas collection header on a monthly basis as provided in Condition 7.1.12(d)(iii); and [40 CFR 60.756(a)(1)]

2. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in Condition 7.1.12(d)(v); and [40 CFR 60.756(a)(2)]

3. Monitor temperature of the landfill gas on a monthly basis as provided in Condition 7.1.12(d)(v). [40 CFR 60.756(a)(3)]

B. Each Permittee seeking to comply with Condition 7.1.3(c)(ii)(C) 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)]

C. If the Permittee seeks to demonstrate compliance with Condition 7.1.3(c)(ii)(C) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment: [40 CFR 60.756(c)]

1. 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)]

2. 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)]

D. If the Permittee seeks to demonstrate compliance with Condition 7.1.3 (c)(ii)(C) 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)]

E. 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)]

F. If the Permittee seeks to demonstrate compliance with Condition 7.1.8(b)(i), the Permittee shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in Condition 7.1.8(b)(ii). 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)]

7.1.9 Recordkeeping Requirements

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

a. The Permittee 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 (megagrams/yr);

ii. Records of the monthly and aggregate annual CO, VOM, PM, NO_x and SO_2 emissions from the affected landfills associated control system (i.e. flares and turbines), calculated based on procedures in Condition 7.1.12, with supporting calculations (tons/mo and ton/yr);

iii. The daily waste acceptance rate in tons per day.

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.

b. The Permittee shall fulfill the recordkeeping requirements pursuant to 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 Condition 7.1.3(c), the Permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered Condition 7.1.3(c), 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 Condition 7.1.3(c)(ii), 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) (See below) 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 Condition 7.1.3(c)(ii)(B) shall include: [40 CFR 60.758(b)(1)]

1. The maximum expected gas generation flow rate as calculated in Condition 7.1.12(d)(i). 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 Condition 7.1.3(c)(ii)(C) 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 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 Condition 7.1.8(b)(iv) 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 ºC

below the average combustion temperature during the most recent performance test at which compliance with Condition 7.1.3(c)(ii)(C) was determined. [40 CFR 60.758(c)(1)(i)]

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 Condition 7.1.8(b)(iv). [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 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 Condition 7.1.8(b)(iv)(B)(3), 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 Condition 7.1.12(e). [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)]

vi. 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 paragraphs (c)(4) (i) through (v) of this section 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)]

A. The location of each monitored exceedance shall be marked and the location recorded. [40 CFR 60.755(c)(4)(i)]

B. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be re-monitored within 10 calendar days of detecting the exceedance. [40 CFR 60.755(c)(4)(ii)]

C. If the re-monitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days of the second exceedance. If the re-monitoring shows a third exceedance for the same location, the action specified in Condition 7.1.9(b)(vi)(E) shall be taken, and no further monitoring of that location is required until the action specified in paragraph Condition 7.1.9(b)(vi)(E) has been taken. [40 CFR 60.755(c)(4)(iii)]

D. Any location that initially showed an exceedance but has a methane concentration less than 500 ppm methane above background at the 10-day re-monitoring specified in Condition 7.1.9(b)(iv)(B) and (C) shall be re-monitored 1 month from the initial exceedance. If the 1-month remonitoring shows a concentration less than 500 parts per million above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1-month remonitoring shows an exceedance, the actions specified in Condition 7.1.9(b)(iv)(C) or (E) shall be taken. [40 CFR 60.755(c)(4)(iv)]

E. For any location where monitored methane concentration equals or exceeds 500 parts per million above background three times within a quarterly period, a new well or other collection device shall be installed within 120 calendar days of the initial exceedance. An alternative remedy to the exceedance, such as upgrading the blower, header pipes or control device, and a corresponding timeline for installation may be submitted to the Administrator for approval. [40 CFR 60.755(c)(4)(v)]

c. 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 within the disposal site on a map or diagram of the disposal area. [40 CFR 61.154(f)]

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected landfill 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:

a. 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. The Permittee shall fulfill the reporting requirements pursuant to 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 Condition 7.1.7(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 Condition 7.1.3(c)(ii), during such time as the collection and control system is in operation and in compliance with 40 CFR 60.753 and 60.755. [40 CFR 60.757(b)(3)]

ii. Upon becoming subject to the provisions of Condition 7.1.3(c)(ii)(A), 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) (*Tier 3)* and the resulting site-specific methane generation rate constant (k) shall be submitted to the Illinois EPA, Division of Air Pollution Control 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 Condition 7.1.3(c)(ii) 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. The Permittee shall notify the Illinois EPA within 30 days of an exceedance of the limits in Conditions 7.1.3, 7.1.5, or 7.1.6. The notification shall include:

i. Identification of the limit that may have been exceeded.

ii. Duration of the possible exceedance.

iii. An estimate of the amount of emissions in excess of the applicable standard.

iv. A description of the cause of the possible exceedance.

v. When compliance was reestablished.

d. The Permittee shall submit the following information along with its annual emission report:

i. A summary of exceedances of the limits in Conditions 7.1.3 and 7.1.6, if any, which require notification to the Compliance Section in accordance with Condition 7.1.10(g).

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected 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 temporary/emergency gas collection and control system, consisting of wells venting directly to "passive" open 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, emergency mitigation of explosive conditions, etc. In this case a temporary/emergency gas collection and control system is defined as flares operating for no longer than sixty (60) days.

i. The total amount of gas handled by any passive landfill gas collection and control system(s) shall not exceed 158 million cubic feet per year. This is based on an average flow of 18,000 scf/hr and operating 8760 hr/yr, as indicated in the application. Compliance with this requirement shall be based upon the maximum gas handling capacity of the total of all temporary/emergency flares installed at the source.

ii. Any open flares installed under this provision shall comply with the applicable operational and testing requirements of 40 CFR 60.18.

iii. 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.

iv. 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 7.1.10(b)(ii) and in 40 CFR 60.752 upon renewal of the current CAAPP permit.

v. Temporary passive landfill gas collection and control system(s) and flare(s) installed under this provision may be operated for no longer to sixty (60) days under this provision.

vi. The Permittee is required to obtain a new construction permit or revise an existing current construction permit for any landfill gas collection and control system(s) that will be operated on a semi-permanent or permanent basis, i.e., systems operated for longer than sixty (60) days. Such application must be submitted to the Illinois EPA Air Permit Section within thirty (30) days of determining the landfill gas collection and control system(s) is does not meet the definition of a temporary/emergency gas collection and control system.

b. The Permittee shall implement a program to monitor and control 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 requirements of Condition 5.2.2(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 a course of action outlined in the program. Such corrective action may include but is not limited to the application of a protective cover on landfill surfaces, the spraying of surfactant solution or water on a regular basis, or other equivalent treatment methods.

If the fugitive particulate matter program fails to address or inadequately addresses an event that meets

the characteristics of a wind erosion, reentrainment, or fugitive event but was not included in the program at the time the Permittee developed the plan, the Permittee shall revise the program within 45 days after the event to include detailed procedures for operating, monitoring, and maintaining the source during similar events and a program of corrective action for similar events. The Illinois EPA may require the Permittee to make changes to the program if the Illinois EPA finds that the program does not adequately address a wind erosion, reentrainment, or fugitive event.

7.1.12 Compliance Procedures

a. For the purpose of estimating controlled methane, NMOC, 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).

b. Flare emissions shall be calculated based upon the following representative emission factors and landfill gas flow rate records:

Pollutant	Emission Factor (Lbs/hr)
CO	2.44
NO_x	1.09
PM	1.08
SO_2	0.80
VOM	0.0891

These emission factors are from the material balance for the combustion of methane with a maximum flare capacity of 450 scfm, as indicated in the application.

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

i. Provide Landfill PM Emissions and Compliance Procedures

d. Compliance with 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), the specified methods in Condition 7.1.12(d) shall be used to determine whether the gas collection system is in compliance with 40 CFR 60.752(b)(2)(ii). [40 CFR 60.755(a)]

A. For the purposes of calculating the maximum expected gas generation flow rate from the landfill to determine compliance with 40 CFR 60.752(b)(2)(ii)(A) (1), one of the following equations shall be used. The k and Lo kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site specific values demonstrated to be appropriate and approved by the Administrator. If k has been determined as specified in 40 CFR 60.754(a)(4) (*Tier 3*), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment. The active life of the landfill is the age of the landfill plus the estimated number of years until closure. [40 CFR 60.755(a)(1)]

1. For sites with unknown year-to-year solid waste acceptance rate: [40 CFR 60.755(a)(1)(i)]

$$Q_m = 2L_o R (e^{-kc} - e^{-kt})$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year

L_o = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, $year^{-1}$

t = age of the landfill at equipment installation plus the time the owner or operator intends to use the gas mover equipment or active life of the landfill, whichever is less. If the equipment is installed after closure, t is the age of the landfill at installation, years

c = time since closure, years (for an active landfill c = O and e^{-kc} = 1)

2. For sites with known year-to-year solid waste acceptance rate: [40 CFR 60.755(a)(1)(ii)]

$$Q_m = \sum_{i=1}^{n} 2kL_o M_i (e^{-kt_i})$$

where,

Q_m = maximum expected gas generation flow rate, cubic meters per year

k = methane generation rate constant, $year^{-1}$

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the ith section, megagrams

t_i = age of the ith section, years

3. If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in paragraphs (a)(1)(i) and (ii) of this section. If the landfill is

still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations using the equations in paragraphs (a)(1)(i) or (ii) or other methods shall be used to predict the maximum expected gas generation rate over the intended period of use of the gas control system equipment. [40 CFR 60.755(a)(1)(iii)]

ii. For the purposes of determining sufficient density of gas collectors for compliance with 40 CFR 60.752(b)(2)(ii)(A)(2), the owner or operator shall design a system of vertical wells, horizontal collectors, or other collection devices, satisfactory to the Illinois EPA, capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards. [40 CFR 60.755(a)(2)]

iii. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under Condition 7.1.3(c)(ii). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Illinois EPA and/or USEPA for approval. [40 CFR 60.755(a)(3)]

iv. Owners or operators are not required to expand the system as required in Condition 7.1.12(d)(iv) during the first 180 days after gas collection system startup. [40 CFR 60.755(a)(4)]

v. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in Condition 7.1.3(e)(iii). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Illinois EPA and/or USEPA for approval. [40 CFR 60.755(a)(5)]

vi. An owner or operator seeking to demonstrate compliance with 40 CFR 60.752(b)(2)(ii)(A)(4) through the use of a collection system not conforming to the specifications provided in 40 CFR 60.759 shall provide information satisfactory to the Illinois EPA and/or USEPA as specified in 40 CFR 60.752(b) (2)(i)(C) demonstrating that off-site migration is being controlled. [40 CFR 60.755(a)(6)]

e. For purposes of compliance with Condition 7.1.3(e)(i), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in Condition 7.1.3(c)(ii)(A). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of: [40 CFR 60.755(b)]

i. 5 years or more if active; or [40 CFR 60.755(b)(1)]

ii. 2 years or more if closed or at final grade. [40 CFR 60.755(b)(2)]

f. The following equation shall be used for the purposes of calculating uncontrolled NMOC and VOM emissions and determine compliance with the emission limitations in Condition 7.1.6(c) if emissions are uncontrolled. The k and L_o kinetic factors should be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42) or other site-specific values demonstrated to be appropriate and approved by the Illinois EPA. If NMOC or k has been determined as specified in Condition 7.1.7 (*Tier 2* and *Tier 3*), respectively, the value of k determined from the test(s) shall be used. If the VOM content of the landfill gas has been determined, the percent VOM determined from the test shall be used. The active life of the landfill is the age of the landfill plus the estimated number of years until closure.

$$M_{NMOC} = \sum_{i=1}^{n} 2kL_o M_i (e^{kt_i})(C_{NMOC})(3.6\times10^{-9})$$

$$M_{VOM} = M_{NMOC} \times F$$

where,

M_{NMOC} = Total NMOC emission rate from the landfill, megagrams per year

k = methane generation rate constant, $year^{-1}$

L_o = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the ith section, megagrams

t_i = age of the ith section, years

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

3.6×10^{-9} = conversion factor

M_{VOM} = Total VOM emission rate from the landfill, megagrams per year.

F = Fraction of VOM in the NMOC emitted, e.g., 0.39 per AP-42.

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if documentation of the nature and amount of such wastes is maintained.

7.2 Gasoline Tank

7.2.1 Description

300 gallon above ground gasoline storage tank used to deliver gasoline to equipment and vehicles.

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Gasoline Tank	300 gallon above ground gasoline storage tank	Submerged Loading

7.2.3 Applicability Provisions and Applicable Regulations

a. The “affected gasoline tank” for the purpose of these unit-specific conditions, is the gasoline tank described in Condition 7.2.1 and 7.2.2.

b. The affected gasoline tank is subject to the emission limits identified in Condition 5.2.2.

c. The Permittee is subject to 35 IAC 215.122 Loading Operations, which follows:

No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gal), unless such tank is equipped with a permanent submerged loading pipe or an equivalent device approved by the Illinois EPA according to the provisions of 35 IAC 201, or unless such tank is a pressure tank as described in 35 IAC 215.121(a) or is fitted with a recovery system as described in 35 IAC 215.121(b)(2) [35 IAC 215.122(b)].

d. No person shall cause or allow the discharge of more than 3.6 kg/hr (8 lb/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 IAC 215.302, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of 35 IAC 215 Subpart G shall only apply to photochemically reactive material [35 IAC 215.301].

7.2.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected gasoline tank not being subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels, 40 CFR Part 60, Subpart Kb because the affected gasoline tank does not have a capacity greater than 10,566 gallons.

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

7.2.5 Operational and Production Limits and Work Practices

a. The affected gasoline tank shall be loaded via a permanent submerged loading pipe or equivalent device approved by the Illinois EPA.

7.2.6 Emission Limitations

There are no specific emission limitations for this unit, however, there are source wide emission limitations in Condition 5.5 that include this unit.

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6 and 7.2.3, the Permittee shall maintain records of the following items for the affected gasoline tank to demonstrate compliance with Conditions 5.5.1, 7.2.3 and 7.2.6 pursuant to Section 39.5(7)(b) of the Act:

a. The throughput of the affected gasoline tank (gallons/yr).

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected gasoline tank 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:

a. The Permittee shall notify the Illinois EPA within 30 days of an exceedance of the limits in Conditions 7.2.3, 7.2.5, or 7.2.6. The notification shall include:

i. Identification of the limit that may have been exceeded.

ii. Duration of the possible exceedance.

iii. An estimate of the amount of emissions in excess of the applicable standard.

iv. A description of the cause of the possible exceedance.

v. When compliance was reestablished.

b. The Permittee shall submit the following information along with its annual emission report:

i. A summary of exceedances of the limits in Conditions 7.2.3 and 7.2.6, if any, which require notification to the Compliance Section in accordance with Condition 7.2.10(a).

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected engine 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:

None

7.2.12 Compliance Procedures

Compliance with Condition 5.5 shall be determined using the recordkeeping requirements of Condition 7.2.9 and the following emission factors:

a. For the purpose of estimating VOM emissions from storage tanks, the most current version of the USEPA TANKS program is acceptable.

b. Compliance with Condition 7.2.3(d) shall be determined using the Monitoring and Recordkeeping requirements of Condition 7.2.8 and 7.2.9, respectively.

c. Compliance with Condition 7.2.3(c) is assured as long as Condition 7.2.5 is met.

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 _____**{insert public notice start date}** (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

8.3 Emissions Trading Programs

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

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

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

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

a. The changes do not violate applicable requirements;

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

c. The changes do not constitute a modification under Title I of the CAA;

d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and

e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:

i. Describe the physical or operational change;

ii. Identify the schedule for implementing the physical or operational change;

iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;

iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

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

8.6 Reporting Requirements

8.6.1 Monitoring Reports

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

Monitoring Period	Report Due Date
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
5415 North University
Peoria, Illinois 61614

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

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

iv. USEPA Region 5 - Air Branch

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

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

8.7 Obligation to Comply with Title I Requirements

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

I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

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

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

a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and

d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

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

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

d. Sample or monitor any substances or parameters at any location:

   i. At reasonable times, for the purposes of assuring permit compliance; or

   ii. As otherwise authorized by the CAA, or the Act.

e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and

f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

9.4 Obligation to Comply With Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or

resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for

continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].

b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

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

a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.

c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

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

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

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

   i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;

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

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

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

b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

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

9.12.2 Reopening and Revision

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

a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;

b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;

c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and

d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

10.1 Attachment 1 Example Certification by a Responsible Official

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

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.2 Attachment 2 Guidance on Revising This Permit

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

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

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

1. Administrative Permit Amendment

- Corrects typographical errors;
- Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- Requires more frequent monitoring or reporting by the Permittee;
- Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA;
- Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
- Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application of an approved economic incentives rule, marketable permits rule, or generic emissions trading rule.

2. Minor Permit Modification

- Do not violate any applicable requirement;

- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;

- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

  - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and

  - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.

- Are not modifications under any provision of Title I of the CAA; and

- Are not required to be processed as a significant permit modification.

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

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

- The source’s suggested draft permit/conditions;

- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

- Information as contained on form 271-CAAPP for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

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

- Applications requesting a significant change in existing monitoring permit terms or conditions;

- Applications requesting a relaxation of reporting or recordkeeping requirements; and

- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

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

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

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

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or

- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or

- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

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

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

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

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

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	ID number:
	Permit number:
	Date received:

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

Source Information

1. Source name:		
2. Source street address:		
3. City:		4. Zip code:
5. Is the source located within city limits?		☐ Yes ☐ 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? ☐ Owner ☐ Operator	20. All correspondence to: (check one) ☐ Owner ☐ Operator ☐ 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?	☐ Yes ☐ 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?	☐ Yes ☐ 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?	☐ Yes ☐ No
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	☐ Yes ☐ 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.	☐ Yes ☐ 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?	☐ Yes ☐ No ☐ 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.

10.4 Attachment 4 Guidance on Renewing This Permit

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

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

1. A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.

2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.

3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.

4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.

5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.

6. Information addressing any outstanding transfer agreement pursuant to the ERMS.

7. a. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked

yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.

8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.

9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

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

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

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

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

Mail renewal applications to:

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