

217/782-2113

"RENEWAL"
CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

PERMITTEE:

Lee County Landfill, Inc.
Attn: Eric Dippon - Environmental Manager
13832 South Kostner Avenue
Crestwood, Illinois 60445

I.D. No.: 103806AAL
Application No.: 99090089

Date Received: February 20, 2008
Date Issued: November 20, 2008
Expiration Date¹: November 20, 2013

Operation of: Municipal Solid Waste Landfill
Source Location: 1214 South Bataan Road, Dixon, 61021, Lee County
Responsible Official: David Geier, General Manager

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 Mike Davidson at 217/782-2113.

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

ECB:MED:jws

cc: Illinois EPA, FOS, Region 2
CES
Lotus Notes

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

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1.0 INTRODUCTION

1.1 Source Identification

Lee County Landfill, Inc.
1214 South Bataan Road
Dixon, Illinois 61021
708/389-3660

I.D. No.: 103806AAL
County: Lee
Standard Industrial Classification: 4953, Refuse Systems

1.2 Owner/Parent Company

Lee County Landfill, Inc.
13832 South Kostner Avenue
Crestwood, Illinois 60445

1.3 Operator

Lee County Landfill, Inc.
13832 South Kostner Avenue
Crestwood, Illinois 60445

Eric Dippon - Environmental Manager
708/389-3660

1.4 Source Description

The Lee County Landfill, Inc., a subsidiary of Allied Waste, is located on 1214 South Bataan Road near Dixon. The landfill has been operating since 1998 and is classified as a MSW landfill. It is currently being operated under a solid waste permit issued by Illinois EPA BOL as per the requirements of 35 IAC Subtitle G: Waste Disposal. 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.

MSW is delivered at the source by waste hauling and collection trucks. These trucks deliver the waste to the active area of the landfill where it is graded and compacted by heavy equipment. Prior to the end of the business day, the equipment is then used cover the waste with a layer of daily cover as per the requirements of 35 IAC Subtitle G: Waste Disposal.

The landfill is developed in phases. Phase development includes site preparation of the landfill invert and construction of the liner and leachate/condensate drainage/collection systems. Once a phase has been filled to near capacity, the next phase is constructed. Areas that are filled at their final elevation are covered with a final cover. The

final cover includes a geomembrane overlain with 3 feet of soil. The final cover surface is then planted with vegetation.

Landfill gas emissions from the source are generated from the decomposition of materials deposited in the landfill. Landfill gas is composed primarily of methane and carbon dioxide. A small percentage of other constituents present in the gas include hydrogen sulfide and nonmethane organic compound(s) (NMOC).

At the time of issuance of this permit, a landfill gas collection and control system is used to collect and burn a portion of the landfill gas. The control system includes a landfill gas to energy facility owned and operated by Dixon/Lee Energy Partners, LLC (CAAPP Permit Application No.: 00070051 - BOA I.D. No. 103020ACJ). Dixon/Lee Energy Partners, LLC is a separate corporate entity, which has contracted with the Lee County Landfill, Inc. to use the gas generated from the landfill in its landfill gas to energy facility.

The landfill gas collection includes condensate collection sumps and knockouts to prevent pipe blockage. The landfill also has a leachate collection system.

Other emissions at the source include: particulate matter emissions (fugitive dust) generated from roads and excavation activities; VOM emissions from the leachate/condensate storage tank; landfill combustion emissions (NO_x, CO, SO₂, PM/PM₁₀, and VOM) from the landfill control system (enclosed flare); and multiple small RICE engines at the site.

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

1.5 Title I Conditions

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

- a. This permit contains Title I conditions that reflect Title I requirements established in permits previously issued for this source, which conditions are specifically designated as "T1."
- b. This permit contains Title I conditions that are newly established in this CAAPP permit, which conditions are specifically designated as "T1N."

2.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

ACMA	Alternative Compliance Market Account
Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
a.k.a.	Also known as
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
BAT	Best Available Technology
bhp	Brake Horsepower
BOA	Bureau of Air (Illinois EPA)
BOL	Bureau of Land (Illinois EPA)
Btu	British thermal unit
Btu/scf	British thermal unit per standard cubic feet
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstract Service
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System
dscf	dry standard cubic feet
ERMS	Emissions Reduction Market System
ft ³	Cubic Feet
gal	Gallon
g/bhp-hr	grams per braking horsepower hour
GCCS	gas collection and control system
GDF	gasoline dispensing facility
HAP	Hazardous Air Pollutant
hr	Hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
°K	Degrees Kelvin
kPa	Kilopascals
kg	Kilograms
kW	Kilowatts
l	Liters
LAER	Lowest Achievable Emission Rate
lb	Pound
ILCS	Illinois Compiled Statutes
LFG	Landfill Gas
MACT	Maximum Achievable Control Technology
MSSCAM	Major Stationary Sources Construction and Modification (35 IAC 203, New Source Review for non-attainment areas)

Mg	Megagrams
MW	Megawatts
MWe	Megawatts electricity
mmBtu	Million British Thermal Units
mmBtu/hr	Million British Thermal Units per hour
mmHg	Millimeters of Mercury
mmcf	Million cubic feet
mmscf	Million standard cubic feet
MSW	Municipal Solid Waste
NMOC	Nonmethane Organic Compound
mo	Month
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
psia	pounds per square inch absolute
PM	Particulate Matter
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
PM _{2.5}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
ppm	parts per million
ppmv	parts per million volume
PSD	Prevention of Significant Deterioration (40 CFR 52.21, New Source Review for attainment areas)
RICE	Reciprocating Internal Combustion Engine
RMP	Risk Management Plan
scf	standard cubic feet
scfm	standard cubic feet per minute
scm	standard cubic meters
SIP	State Implementation Plan
SSM	Startup, Shutdown, and Malfunction
SO ₂	Sulfur Dioxide
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material
yr	Year

3.0 CONDITIONS FOR INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

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

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

34,000 Gallon Leachate Storage Tank (AST1)

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

None

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

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 mmBtu/hr that fire only natural gas, propane, or liquefied petroleum gas; (B) Units with a rated heat input capacity of less than 1.0 mmBtu/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)].

Coating operations (excluding powder, architectural and industrial maintenance coating) with aggregate VOM usage that never exceeds 15 lbs/day from all coating lines at the source, including VOM from coating, dilutents, and cleaning materials [35 IAC 201.210(a)(13)].

Gas turbines and stationary reciprocating internal combustion engines of between 112 kW and 1,118 kW (150 and 1,500 horsepower) power output that are emergency or standby units

[35 IAC 201.210(a)(16)]. Note: The above excludes those units in Section 7.3.

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

3.2 Compliance with Applicable Requirements

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

- 3.2.1 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322 (see Attachment 2) and 35 IAC Part 266. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.2 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, which requires that organic material emissions not exceed 8.0 pounds per hour or, if no odor nuisance exists, do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.2.3 For each open burning activity, the Permittee shall comply with 35 IAC Part 237, including the requirement to obtain a permit for open burning in accordance with 35 IAC 237.201, if necessary.
- 3.2.4 For each storage tank that has a storage capacity greater than 946 liters (250 gallons) and, if no odor nuisance exists, that stores an organic material with a vapor pressure exceeding 2.5 psia at 70 °F, the Permittee shall comply with the applicable requirements of 35 IAC 215.122, which requires use of a permanent submerged loading pipe, submerged fill, or a vapor recovery system.

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
01	MSW Landfill	<p>Commenced Construction</p> <p>June 1998</p> <p>Operation Commenced</p> <p>November 1998</p> <p>BOA Expansion Permit</p> <p>November 30, 2006 (06020081)</p>	Gas to Energy Facility ¹
02	Gasoline Storage Tank	----	Submerged Loading
03	RICE Engines (Subject to NESHAP - 40 CFR 63 Subpart ZZZZ)	----	None

¹ Adjacent gas to energy plant owned and operated by Dixon/Lee Energy Partners, LLC (CAAPP Permit Application No.: 00070051 - BOA I.D. No. 103020ACJ).

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of carbon monoxide and nitrogen oxide emissions.
- 5.1.2 This permit is issued based on the source requiring a CAAPP permit because the source is subject to a standard, limitation, or other requirement under Section 111 (NSPS) of the CAA for which USEPA requires a CAAPP permit, pursuant to 40 CFR 70.3(a)(2) [Section 39.5(2)(a)(ii) of the Act]. Specifically, this source is subject to the NSPS for Municipal Solid Waste Landfills, 40 CFR 60 Subpart WWW (See Condition 7.1.3(b) and 40 CFR 60.755(c)).
- 5.1.3 This permit is issued based on the source being a natural minor and area source of HAPs.
- 5.1.4 For purposes of the CAAPP, the Lee County Landfill (Owned by Lee County Landfill, Inc. - BOA I.D. No. 103806AAL), located at 1279 North Bataan Road, Dixon is considered a single source with the adjacent Dixon/Lee Energy Partners, LLC (CAAPP Permit Application No.: 00070051 - BOA I.D. No. 103020ACJ). The source has elected to obtain separate CAAPP permits for these locations.

5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated attainment or unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants (CO, lead, NO₂, ozone, PM_{2.5}, PM₁₀, SO₂).

5.3 Source-Wide Applicable Provisions and Regulations

- 5.3.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions for Specific Emission Units) of this permit.
- 5.3.2 In addition, emission units at this source are subject to the following regulations of general applicability:
 - a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
 - b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter,

with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

- c. 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, submerged fill or an equivalent device approved by the Illinois EPA. [35 IAC 215.122(b)]

If no odor nuisance exists the limitations of the above shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater of 294.3°K (70°F). [35 IAC 215.122(c)]

"Submerged loading pipe", for purposes of the above is defined in 35 IAC 211.6470(a).

5.3.3 Ozone Depleting Substances

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

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

5.3.4 Risk Management Plan (RMP)

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

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

5.3.5 Future Emission Standards

- a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).
- b. This permit and the terms and conditions herein do not affect the Permittee's past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA.

5.3.6 Episode Action Plan

- a. Pursuant to 35 IAC 244.141, 244.142, and 244.143, 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 and is incorporated by reference into this permit.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared by the Director of the Illinois EPA or his or her designated representative.
- c. If an operational change occurs at the source which invalidates the plan, a revised plan shall be submitted to the Illinois EPA for review within 30 days of the change, pursuant to 35 IAC 244.143(d). Such plans shall be further revised if disapproved by the Illinois EPA.

5.4 Source-Wide Non-Applicability of Regulations of Concern

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

5.5 Source-Wide Control Requirements and Work Practices

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

5.6 Source-Wide Production and Emission Limitations

5.6.1 Permitted Emissions for Fees

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	28.70
Sulfur Dioxide (SO ₂)	----
Particulate Matter (PM)	127.00
Nitrogen Oxides (NO _x)	----
HAP, not included in VOM or PM	19.50
Total	175.20

5.6.2 Emissions of Hazardous Air Pollutants

Pursuant to Section 39.5(7)(a) of the Act, the emissions of HAPs from the source shall be less than 10 tons/year for each individual HAP and 25 tons/year for all HAPs combined. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). This condition is being imposed so that the source is not a major source of HAP emissions.

5.6.3 Other Source-Wide Production and Emission Limitations

This permit is issued based on the total emissions from the stationary source, i.e., the adjacent engines and utility flare owned by Dixon/Lee Energy Partners, LLC BOA ID. No. 103020ACJ, and the Lee County Landfill, Inc., not exceeding the following limitations:

<u>Pollutants</u>	<u>CO</u>
(Tons/Yr)	225.0

This limit is based on the maximum annual landfill gas burned from the engines and utility flare of 859 mmscf/yr and 116 mmscf/yr, respectively.

The limits on carbon monoxide are limitations established in Permit 99090063, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. See Condition 7.1.6. [T1]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

5.7 Source-Wide Testing Requirements

- 5.7.1 Pursuant to 35 IAC 201.282 and Section 4(b) of the Act, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests. [35 IAC 201.282(a)]
 - b. Testing by the Illinois EPA: The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary. [35 IAC 201.282(b)]
 - c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.8 Source-Wide Monitoring Requirements

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

5.9 Source-Wide Recordkeeping Requirements

5.9.1 Annual Emission Records

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

5.9.2 Retention and Availability of Records

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

5.10 Source-Wide Reporting Requirements

5.10.1 General Source-Wide Reporting Requirements

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

5.10.2 Annual Emissions Report

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

5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

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

5.12 Source-Wide Compliance Procedures

5.12.1 Procedures for Calculating Emissions

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

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

This section is reserved for emissions control programs. As of the date of issuance of this permit, there are no such programs applicable to this source.

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 Municipal Solid Waste Landfill Control: Gas to Energy Facility

7.1.1 Description

The landfill has been operating since 1998 and is classified as a MSW landfill. It is currently being operated under a solid waste permit issued by Illinois EPA BOL as per the requirements of 35 IAC Subtitle G: Waste Disposal. 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.

MSW is delivered at the source by waste hauling and collection trucks. These trucks deliver the waste to the active area of the landfill where it is graded and compacted by heavy equipment. Prior to the end of the business day, the equipment is then used cover the waste with a layer of daily cover as per the requirements of 35 IAC Subtitle G: Waste Disposal.

The landfill is developed in phases. Phase development includes site preparation of the landfill base grades and construction of the liner and leachate/condensate drainage/collection systems. Once a phase has been filled to near capacity, the next phase is constructed. Areas that are filled at their final elevation are covered with a final cover. The final cover includes a geomembrane overlain with 3 feet of soil. The final cover surface is then planted with vegetation.

Landfill gas emissions from the source are generated from the decomposition of materials deposited in the landfill. Landfill gas is composed primarily of methane and carbon dioxide. A small percentage of other constituents present in the gas include hydrogen sulfide and nonmethane organic compound(s) (NMOC).

At the time of issuance of this permit, a landfill gas collection and control system is used to collect and burn a portion of the landfill gas. The control system includes a landfill gas to energy facility owned and operated by Dixon/Lee Energy Partners, LLC (CAAPP Permit Application No.: 00070051 - BOA I.D. No. 103020ACJ). Dixon/Lee Energy Partners, LLC is a separate corporate entity, which has contracted with the Lee County Landfill, Inc. to use the gas generated from the landfill in its landfill gas to energy facility. (See Condition 5.1.4)

The landfill gas collection includes condensate collection sumps and knockouts to prevent pipe blockage. The landfill also has a leachate collection system.

Other emissions at the source include: particulate matter emissions (fugitive dust) generated from roads and excavation activities and landfill combustion emissions (NO_x, CO, SO₂, PM/PM₁₀, and VOM) from the landfill control system (enclosed flare).

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

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Significant Dates	Emission Control Equipment
01	MSW Landfill	<p>Commenced Construction</p> <p>June 1998</p> <p>Operation Commenced</p> <p>November 1998</p> <p>BOA Expansion Permit</p> <p>November 30, 2006 (06020081)</p>	Gas to Energy Facility ¹

1 Adjacent gas to energy plant owned by Dixon/Lee Energy Partners, LLC and operated by Illinois Electrical Generation Partners, LLC (CAAPP Permit Application No.: 00070051 - BOA I.D. No. 103020ACJ).

7.1.3 Applicable Provisions and Regulations

- a. The "affected Municipal Solid Waste (MSW) landfill" for the purpose of these unit-specific conditions, is described in Conditions 7.1.1 and 7.1.2.
- b. The affected landfill is subject to the NSPS for Municipal Solid Waste Landfills, 40 CFR 60 Subparts A and WWW, because the affected landfill commenced construction, reconstruction or modification or began accepting waste on or after May 30, 1991. [40 CFR 60.750]

The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with USEPA.

Therefore, the Permittee is required to comply with the requirements of the NSPS for Municipal Solid Waste

Landfills, 40 CFR 60 Subparts A and WWW, and/or any amendments promulgated by USEPA.

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

- c. The source (See Condition 5.1.4) is subject to 40 CFR 63, Subparts A and AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills.
 - i. Applicability is based upon the affected MSW landfill meeting the criteria in 40 CFR 63.1935(a)(3). Specifically, the MSW landfill has accepted waste since November 8, 1987 or has additional capacity for waste deposition and the MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to §60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill. [40 CFR 63.1935(a)(3)]
 - ii. The source is defined as an existing affected source since it was constructed prior to November 7, 2000. [40 CFR 63.1940]
 - iii. As an existing affected source and an area source (See Condition 5.1.3) meeting the criteria in 40 CFR 63.1935(a)(3) (See Conditions 7.1.3(c)(i) and (ii)), the Permittee must comply with the requirements in 40 CFR 63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW. [40 CFR 63.1945(b) and 63.1945(f)]

These requirements include but are not limited to the following:

- A. Compliance with the requirements of 40 CFR Part 60, Subpart WWW. [40 CFR 63.1955(a)(1)]
- B. Compliance with the requirements in 40 CFR 63.1960 through 63.1985 and with the general provisions specified in Table 1 of 40 CFR 63, Subpart AAAA. [40 CFR 63.1955(b)]

- C. For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with this subpart, except that all affected sources must comply with the Startup, Shutdown, and Malfunction (SSM) requirements in 40 CFR 63 Subpart A of this part as specified in Table 1 of the NESHAP and all affected sources must submit compliance reports every 6 months as specified in §63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average. [40 CFR 63.1955(c)]
- D. Compliance is determined in the same way it is determined for 40 CFR Part 60, Subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of 40 CFR Subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop and implement a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failures to write, implement, or maintain a copy of the SSM plan is a deviation from the requirements of this subpart. [40 CFR 63.1960]

At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize

emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA and/or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in 40 CFR 63.6(e)(3)), review of operation and maintenance records, and inspection of the source. [40 CFR 63.6(e)(1)]

- E. A deviation is defined in 40 CFR 63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in 40 CFR 63.1965(a) through (c). These include:
1. A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded. [40 CFR 63.1965(a)]
 2. A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour. [40 CFR 63.1965(b)]
 3. A deviation occurs when a SSM plan is not developed, implemented, or maintained on site. [40 CFR 63.1965(c)]
- F. Keep records and reports as specified in 40 CFR part 60 Subpart WWW, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months. [40 CFR 63.1980(a)]

- G. You must also keep records and reports as specified in the general provisions of 40 CFR Part 60 and 63 as shown in Table 1 of 40 CFR 63, Subpart AAAA. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports. [40 CFR 63.1980(b)]
- d. The affected landfill is subject to the NESHAP for Asbestos, 40 CFR 61 Subparts A and M, because the affected landfill is a source that is listed in the NESHAP. [40 CFR 61.140]

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

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

7.1.4 Non-Applicability of Regulations of Concern

- a. The affected landfill is not subject to the requirements of 35 IAC 212.321, Emissions of Particulate Matter from Process Emission Units, because due to the unique nature of this process, such rules cannot reasonably be applied.
- b. The affected MSW landfill is not subject to the requirements of 35 IAC Part 220, Non-Methane Organic Compounds, because the MSW landfill was constructed or modified after May 30, 1991, therefore it is subject to the requirements of 40 CFR 60, Subpart WWW, in lieu of the requirements of 35 IAC Part 220. [35 IAC 220.200(b)]
- c. This permit is issued based on the affected MSW Landfill not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the

affected MSW landfill is subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

7.1.5 Control Requirements and Work Practices

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

The Permittee shall comply with the requirements of 40 CFR 60.752(b)(2). These requirements include but are not limited to the following:

- i. Submittal of a NMOC collection and control system design plan prepared by a professional engineer to the Illinois EPA, Division of Air Pollution Control, Permit Section within 1 year. The NMOC collection and control system design plan shall include the information required under 40 CFR 60.752(b)(2)(i)(A), (B) and (C). [40 CFR 60.752(b)(2)(i)]:

- A. The Illinois EPA finds that the Landfill Gas Collection and Control System Design Plans, dated June 11, 2007, See Construction Permit Application 07060038, meets the requirements of 40 CFR 60.752(b)(2)(i)(A), (B), and (C). Deviations from or modifications to the plans must be approved by the Illinois EPA.

It should be noted that the above plan was submitted pursuant to the expansion and other changes at the landfill (See Construction Permit Application 06020081) and revises the plan, dated January 17, 2001, which was previously referenced in this CAAPP permit, issued December 1, 2003.

- B. This permit is issued based upon the following alternatives for the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 40 CFR 60.753 through 60.758 proposed in the Landfill Gas Collection and Control System Design Plan pursuant to 40 CFR 60.752(b)(2)(i)(B), being approved by Illinois EPA:

1. As an alternative to measurement of oxygen in accordance with 40 CFR 60.753(c)(2), the Permittee may use a portable meter as described in the application, consistent with USEPA's general approval of such monitoring methodology (See the application, Section 4.6.2.5 of the GCCS Design Plan).

2. I. Notwithstanding other conditions in this permit, the Permittee may design and operate the GCCS in accordance with alternatives to the operational standards, test procedures, procedures for compliance measures, monitoring, recordkeeping, and reporting provisions of the NSPS, 40 CFR 60.753 through 60.758, if formally approved by the USEPA on a source-specific basis.
- II. The Permittee shall promptly submit a copy of any such approval by USEPA to the Illinois EPA.

The above conditions were previously recorded in Construction Permit Application 07060038.

- ii. 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)]
- iii. 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)]
 - A. An open flare designed and operated in accordance with 40 CFR 60.18; [40 CFR 60.752(b)(2)(iii)(A)]
 - B. A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control

system using the test methods specified in 40 CFR 60.754(d). [40 CFR 60.752(b)(2)(iii)(B)]

1. If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone. [40 CFR 60.752(b)(2)(iii)(B)(1)]
 2. The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 40 CFR 60.756. [40 CFR 60.752(b)(2)(iii)(B)(2)]
- C. Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of 40 CFR 60.752(b)(2)(iii) (A) or (B). [40 CFR 60.752(b)(2)(iii)(C)]
- iv. 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)]
 - v. The collection and control system may be capped or removed provided that all the conditions of 60.752(b)(2)(b)(2)(v) (A), (B), and (C) are met. [40 CFR 60.752(b)(2)(v)]
- b. The Permittee shall operate the gas collection and control system used to comply with the provisions of Condition 7.1.5(a) and 40 CFR 60.752(b)(2)(ii), in accordance with the provisions of 40 CFR 60.753. These requirements include but are not limited to the following:
- i. Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for: [40 CFR 60.753(a)]
 - A. 5 years or more if active; or
 - B. 2 years or more if closed or at final grade;
 - ii. Operate the collection system with negative pressure at each wellhead except under the following conditions; [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 Condition 7.1.10 and 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 Illinois EPA and/or USEPA; [40 CFR 60.753(b)(3)]
- iii. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55°C and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. Nitrogen or oxygen levels shall be determined based upon the applicable methods and or procedures shown in 40 CFR 60.753(c)(1) or (2). [40 CFR 60.753(c)]
- 1. The nitrogen level shall be determined using Method 3C, unless an alternative test method is established as allowed by Condition 7.1.5(a)(i) and 40 CFR 60.752(b)(2)(i). [40 CFR 60.753(c)(1)]
 - 2. Unless an alternative test method is established as allowed by Condition 7.1.5(a)(i) and 40 CFR 60.752(b)(2)(i) of this subpart, the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that: [40 CFR 60.753(c)(2)]
 - A. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;
 - B. A data recorder is not required;

- C. Only two calibration gases are required, a zero and span, and ambient air may be used as the span;
 - D. A calibration error check is not required;
 - E. The allowable sample bias, zero drift, and calibration drift are ± 10 percent.
- 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 7.1.5(a)(iii) and 40 CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; [40 CFR 60.753(e)]
- vi. Operate the control or treatment system at all times when the collected gas is routed to the system; [40 CFR 60.753(f)] and
- vii. If monitoring demonstrates that the operational requirements in Condition 7.1.5(b)(ii), (iii) or (iv) and 40 CFR 60.753(b), (c), or (d) are not met, corrective action shall be taken as specified in Conditions 7.1.12(c)(iii) through (v) or 7.1.8(a)(i) and 40 CFR 60.755(a)(3) through (5) or 40 CFR 60.755(c). If corrective actions are taken as specified in Conditions 7.1.12(c)(iii) through (v) or 7.1.8(a)(i) and 40 CFR 60.755, the monitored exceedance is not a violation of the operational

requirements in Condition 7.1.5(b) and 40 CFR 60.753.
[40 CFR 60.753(g)]

In addition, the monitored exceedance is not considered to be a reportable "deviation" pursuant to Condition 5.10.1 and 7.1.10 where the corrective action specified in 40 CFR 60.755(a)(3) through (d), 40 CFR 60.755(c) or where a request for an alternative timeline to perform corrective action and achieve the operational requirements has been submitted to the Illinois EPA. An explanation for the alternative timeline and timetable for corrective action must be included with the request for an alternative timeline.

- c. This permit does not relieve the Permittee of the responsibility to fully comply with applicable requirements of 40 CFR 60 Subpart WWW and 40 CFR 63 Subpart AAAAA. In particular, if the Permittee is relying upon Dixon/Lee Energy Partners (See CAAPP Permit Application No.: 00070051 - BOA I.D. No. 103020ACJ) to control collected gas, the Permittee shall take required measures to assure that Dixon/Lee Energy Partners is properly controlling collected gas. If Dixon/Lee Energy is unwilling or unable to properly control landfill gas, the Permittee shall take appropriate measures to assure compliance with 40 CFR 60 Subpart WWW and 40 CFR 63 Subpart AAAAA requirements for control of landfill gas.
- d. NESHAP 40 CFR 61 Subpart M: Handling Procedures and Control Measures for the Disposal of ACWM

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

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

3. The Permittee shall cover the asbestos-containing waste material with at least 60 centimeters (2 feet) of compacted nonasbestos-containing material, and maintain it to prevent exposure of the asbestos-containing waste. [40 CFR 61.151(a)(3)]
- B. Unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as required in 40 CFR 61.151(b), or comply with 40 CFR 61.151(a)(2) or (a)(3). [40 CFR 61.151(b)]
 - C. The Permittee may use an alternative control method that has received prior approval of the Illinois EPA rather than comply with the requirements of 40 CFR 61.151(a) or (b). [40 CFR 61.151(c)]
- ii. Active Waste Disposal Sites [40 CFR 61.154]:
- A. For any active waste disposal site that receives asbestos-containing waste material from a source covered under 40 CFR 61.149, 61.150, or 61.155, the Permittee must comply with the following requirements:
 1. Either there must be no visible emissions to the outside air from any active waste disposal site where asbestos-containing waste material has been deposited, or the requirements of 40 CFR 61.154(c) or (d) must be met. [40 CFR 61.154(a)]
 2. Unless a natural barrier adequately deters access by the general public, either warning signs and fencing must be installed and maintained as shown in 40 CFR 61.154(b), or the requirements of 40 CFR 61.154(c)(1) must be met. [40 CFR 61.154(b)]

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

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

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

- 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)]

e. Fugitive Dust Program

- i. The Permittee shall implement a program to monitor and control fugitive dust emissions from the landfill due to wind erosion on the landfill surfaces, particulate matter re-entrainment during landfill activities and fugitive particulate matter emissions from any roadway or parking area on at least a weekly basis.

- ii. In accordance with the above, the Permittee shall carry out monitoring, inspection, and control measures for fugitive dust in accordance with a written control program maintained by the Permittee. The monitoring program shall be implemented based upon the procedures shown in Condition 7.1.7(e) and 35 IAC 212.301. Further, the program shall set forth the measures being implemented to demonstrate compliance with Conditions 5.3.2(a), 7.1.5(e), and 7.1.6(a), respectively, i.e., the control of visible fugitive dust and the control of particulate emissions from each area of the landfill with the potential to generate significant quantities of fugitive dust. This program shall include:

- A. A map or diagram showing the location of all fugitive emission units controlled, including the location, identification, length, and width of roadways, and volume and nature of expected traffic or other activity;

- B. Estimated dust emissions control technique (e.g., water spray surfactant spray, water flushing, or sweeping); and
 - C. Triggers for additional control, e.g., observation of extended dust plumes following passage of vehicles.
- iii. No monitoring or 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 Conditions 5.3.2(a), 7.1.5(e), and 7.1.6(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.
 - iv. Monitoring and/or corrective action shall not be required during periods of excess wind as defined in 35 IAC 212.314. Specifically, monitoring and/or corrective action "shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to the above is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
 - v. 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.
 - vi. If the fugitive particulate matter program fails to address or inadequately addresses an event that meets the characteristics of a wind erosion, particulate matter re-entrainment, 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, re-entrainment, or fugitive event.

- vii. The Permittee shall submit a copy of a revised fugitive dust control program to the Illinois EPA for review within 90 days of a request from the Illinois EPA for a revision to the program to address observed deficiencies in the control program.
- f. i. This permit does not relieve the Permittee of the responsibility to comply with all Local, State and Federal Regulations which are part of the applicable Illinois State Implementation Plan, as well as all other applicable Federal, State and Local requirements.
- ii. In particular, this permit does not excuse the Permittee from the obligation to undertake further actions at the source as may be needed to eliminate air pollution, including nuisance due to odors, such as implementation of additional work practices for handling of waste or enhancements to the gas collection system.

7.1.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected MSW landfill is subject to the following:

- a. i. Emissions of particulate matter (PM) from the MSW landfill, considering both existing operations and new operations associated with the expansion shall not exceed 127 tons/year, as determined by the use of appropriate USEPA methodology for estimating emissions of fugitive dust. These limits were established in Permit 06020081. [T1]
- ii. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]
- iii. The above limitations were established in Permit 06020081, pursuant to PSD. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for PSD. [T1]
- b. i. The MSW landfill design capacity shall not exceed 26.067 million megagrams and 36.624 million cubic meters (m³). The above limits are based upon the

maximum design capacity shown in the application and the design capacity which was reported pursuant to 40 CFR 60.757(a)(3) and Permit 06020081. Further, these limits are the basis for determining potential emissions for the landfill and landfill gas control system. [T1N]

- ii. The above limits shall not supersede any design capacity limitations set in permits issued by the Illinois EPA's Bureau of Land (BOL) under 35 IAC Subtitle G: Waste Disposal. [T1N]
- iii. The above limitations are being established in this permit pursuant to Title I of the CAA, specifically 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 emissions of each regulated pollutant addressed by PSD from the affected MSW 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

The Permittee is required to comply with the requirements of the NSPS 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills and/or any amendments promulgated by USEPA. These requirements include but are limited to the following:

- a. The Permittee shall calculate the NMOC emission rate, using either the equation provided in Condition 7.1.7(a)(i) and 40 CFR 60.754(a)(1)(i) or the equation provided in Condition 7.1.7(a)(ii) and 40 CFR 60.754(a)(1)(ii). Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in Condition 7.1.7(a)(i) and 40 CFR 60.754(a)(1)(i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in Condition 7.1.7(a)(ii) and 40 CFR 60.754(a)(1)(ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for k , 170 cubic meters per megagram for L_0 , and 4,000 parts per million by volume as hexane for the CNMOC. 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 meteorologic site, the k value to be used is 0.02 per year. [40 CFR 60.754(a)]
 - 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)]

$$M_{\text{NMOC}} = \sum_{i=1}^n 2kL_oM_i (e^{-kt_i})(C_{\text{NMOC}})(3.6 \times 10^{-9})$$

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 $c = 0$ 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 for M_i if documentation of the nature and amount of such wastes is maintained.

- 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)]

$$M_{\text{NMOC}} = 2L_oR(e^{-kc})(C_{\text{NMOC}})(3.6 \times 10^{-9})$$

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 $c = 0$ 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.

- iii. (a). *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) and 40 CFR 60.754(a)(1) is less than 50 megagrams per year, then the Permittee shall submit an emission rate report as provided in Condition 7.1.10(b)(i)(A) and 40 CFR 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under Condition 7.1.10(b)(i)(A)(1) and 40 CFR 60.752(b)(1). [40 CFR 60.754(a)(2)(i)]
- B. If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the Permittee shall either comply with Condition 7.1.5(a)(i) and 40 CFR 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in Condition 7.1.7(a)(iii)(b) and 40 CFR 60.754(a)(3). [40 CFR 60.754(a)(2)(ii)]
- (b). *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 CNMOC as carbon to CNMOC as hexane. [40 CFR 60.754(a)(3)]

- A. The Permittee shall recalculate the NMOC mass emission rate using the equations provided in Conditions 7.1.7(a)(i) and (ii) and 40 CFR 60.754(a)(1)(i) and (ii) 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) and 40 CFR 60.754(a)(1). [40 CFR 60.754(a)(3)(i)]
 - B. If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the Permittee shall either comply with Condition 7.1.5(a)(ii) and 40 CFR 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in Condition 7.1.7(a)(iii)(c) and 40 CFR 60.754(a)(4). [40 CFR 60.754(a)(3)(ii)]
 - C. If the resulting NMOC mass emission rate is less than 50 megagrams per year, the Permittee shall submit a periodic estimate of the emission rate report as provided in Condition 7.1.10(b)(i)(A)(1) and 40 CFR 60.752(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in Condition 7.1.7(a) and 40 CFR 60.754. [40 CFR 60.754(a)(3)(iii)]
- (c). *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 Conditions 7.1.7(a)(i) and (ii) and 40 CFR 60.754(a)(1)(i) and (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) and 40 CFR 60.754(a)(1). The Permittee shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year. [40 CFR 60.754(a)(4)]

A. If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the Permittee shall comply with Condition 7.1.5(a)(ii) and 40 CFR 60.752(b)(2). [40 CFR 60.754(a)(4)(i)]

B. If the NMOC mass emission rate is less than 50 megagrams per year, then the Permittee shall submit a periodic emission rate report as provided in Condition 7.1.10(b)(i)(A) and 40 CFR 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in Condition 7.1.10(b)(i)(A) and 40 CFR 60.757(b)(1) using the equations in Conditions 7.1.7(a)(i) and (ii) and 40 CFR 60.754(a)(1) using the site-specific methane generation rate constant and NMOC concentration obtained in Condition 7.1.7(a)(iii)(b) and 40 CFR 60.754(a)(3). The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations. [40 CFR 60.754(a)(4)(ii)]

(d). The Permittee may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in Condition 7.1.7(a)(iii)(b) and (c) and 40 CFR 60.754(a)(3) and (a)(4) if the method has been approved by the USEPA. [40 CFR 60.754(a)(5)]

b. After the installation of a collection and control system in compliance with Condition 7.1.12(c) and 40 CFR 60.755, the Permittee shall calculate the NMOC emission rate for

purposes of determining when the system can be removed as provided in Condition 7.1.5(a)(ii)(E) and 40 CFR 60.752(b)(2)(v), using the equation in 40 CFR 60.754(b) (See below). [40 CFR 60.754(b)]:

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

Where:

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

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

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

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

- d. For the performance test required in Condition 7.1.5(a)(ii)(C)(2) and 40 CFR 60.752(b)(2)(iii)(B), Method 25, 25A, 25C or Method 18 of Appendix A of 40 CFR Part 60 (or any other Method approved by the Illinois EPA or USEPA) 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 Condition 7.1.5(a)(ii)(A)(2) and 40 CFR 60.752(b)(2)(i)(B). If using Method 18 of Appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency: [40 CFR 60.754(d)]

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

Where:

NMOC_{in} = Mass of NMOC entering control device

NMOC_{out} = Mass of NMOC exiting control device

- e. The Permittee or a third party, i.e., Dixon/Lee Energy Partners, LLC, ID 103020ACJ, shall sample and analyze the landfill gas entering the control system(s) at least once per year. This analyses shall include determinations for heat value and composition which shall include at least: methane, sulfur compounds, nonmethane organic content, and nonmethane organic compound (NMOC) content, if USEPA Method 18 is used 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 Permittee is allowed to use landfill gas analyses performed by an independent company. The Permittee is required to make the above determinations based upon the average of three consecutive test runs. Written notification of testing or submittal of a formal testing protocol is not required for these tests.

7.1.8 Monitoring Requirements

- a. 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 7.1.5(b)(iv) and 40 CFR 60.753(d). [40 CFR 60.755(c)]
- A. After installation of the collection system, the Permittee shall monitor surface concentrations of methane along the entire

perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in Condition 7.1.8(a)(ii) and 40 CFR 60.755(d). [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 Condition 7.1.5(b)(iv) and 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(a)(i) and 40 CFR 60.755(c) 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 Condition 7.1.5(a)(ii)(A)(2) and 40 CFR 60.752(b)(2)(i)(B):
 - A. Each Permittee seeking to comply with Condition 7.1.5(a)(ii)(B)(1) and 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(c)(iii) and 40 CFR 60.755(a)(3); and [40 CFR 60.756(a)(1)]
 - 2. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in Condition 7.1.12(c)(v) and 40 CFR 60.755(a)(5); and [40 CFR 60.756(a)(2)]
 - 3. Monitor temperature of the landfill gas on a monthly basis as provided in Condition 7.1.12(c)(v) and 40 CFR 60.755(a)(5). [40 CFR 60.756(a)(3)]
 - B. Each Permittee seeking to comply with Condition 7.1.5(a)(iii) and 40 CFR 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the

manufacturer's specifications, the following equipment. [40 CFR 60.756(b)]

1. A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or ± 0.5 degrees Celsius, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts. [40 CFR 60.756(b)(1)]
 2. A device that records flow to or bypass of the control device. The Permittee shall either: [40 CFR 60.756(b)(2)]
 - I. Install, calibrate, and maintain a gas flowrate 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 cap-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 7.1.5(a)(iii) and 40 CFR 60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment: [40 CFR 60.756(c)]
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)]

- 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(c)(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(c)(2)(ii)]
- D. If the Permittee seeks to demonstrate compliance with Condition 7.1.5(a)(iii) and 40 CFR 60.752(b)(2)(iii) using a device other than an open flare or an enclosed combustor, the Permittee shall provide information satisfactory to the Illinois EPA or USEPA as provided in 40 CFR 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The Illinois EPA or USEPA shall review the information and either approve it, or request that additional information be submitted. The Illinois EPA or USEPA may specify additional appropriate monitoring procedures. [40 CFR 60.756(d)]
- 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(a)(i) and 40 CFR 60.755(c), 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)]

- b. A gas flow rate measuring device(s) that shall record the flow to the adjacent gas to energy plant owned and operated by Dixon/Lee Energy Partners, LLC (CAAPP Permit Application No.: 00070051 - BOA I.D. No 103020ACJ) at least once every 15 minutes;

Data provided by Dixon/Lee Energy Partners, LLC may be submitted in lieu of data generated by the Permittee.

- c. In order to assure compliance with the fugitive dust limitation in Conditions 5.3.2(a) and 7.1.3(e) and in conjunction with the fugitive dust minimization program required in Conditions 7.1.5(e), the Permittee shall determine whether fugitive dust emissions are visible across the source's property line. Observations shall be based upon the observations of 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). Fugitive dust emissions from the source shall be monitored at least once per week and the observing period shall be at the discretion of the observer, but not less than one minute. [35 IAC 212.301]

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected MSW landfill to demonstrate compliance with Conditions 5.6.1 and 7.1.5 through 7.1.8, pursuant to Section 39.5(7)(b) of the Act:

- a. General Records:

The Permittee shall keep all records required under 40 CFR 60 Subpart WWW and records to demonstrate compliance with Conditions 5.6, 7.1.3, 7.1.5, 7.1.6, 7.1.7 and 7.1.8. These records shall include but are not limited to the following: [35 IAC 201.281]

- i. Site-specific NMOC emission rate(s) and/or methane generation rate constant(s) (k) used to determine MSW landfill emissions (megagrams/yr).
- ii. Copies of USEPA or Illinois EPA correspondence approving alternative testing, monitoring, and compliance procedures in Conditions 7.1.8, 7.1.9 and 7.1.12.
- iii. As installed records of the landfill gas collection and control system including the following:
 - A. As built diagrams and drawings of the collection system;
 - B. Identification of the make, model, specifications and manufacture of blower and enclosed flare;
 - C. Identification of the as built specifications of the gas collection system; and
 - D. Copies of all records required pursuant to the requirements of 35 IAC Subtitle G.
- iv. Any operating parameters that are continuously monitored and recorded that are associated with proper operation of the affected emission units and/or control equipment including those parameters recorded pursuant to Condition 7.1.9.
- v. Waste Acceptance

Copies of all waste acceptance records required to be maintained under 35 IAC Subtitle G (i.e., daily, monthly, and quarterly solid waste records and summaries). At a minimum these records shall include:

 - A. Monthly records of the amount of waste accepted;
 - B. The year-by-year waste acceptance rate, with calculations; and
 - C. The total amount of waste in-place;
- vi. Fugitive Dust Emissions
 - A. Records of the maximum aggregate annual emissions of fugitive PM from the source estimated based on the applicable emission factors and formulas specified by Condition 7.1.12, with supporting calculations and

documentation that includes the assumptions about the quantity and nature of heavy equipment operation and vehicle traffic at the landfill as related to the landfill operation, so as to demonstrate compliance with the limits in Conditions 5.6.1 and 7.1.6(a).

- B. Records of construction of additional roadways or parking areas or other permanent change to the source or source operations, which alters the maximum aggregate emissions of PM.
- C. The Permittee shall keep these written procedures shown in Condition 7.1.5(e) 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.
- D. Records of all observations made pursuant to the visible emissions monitoring required under Condition 7.1.5(e) and 7.1.8(c) and records of any corrective action taken to control visible emissions (i.e., application of water spray or dust suppressants to roadways and dusty areas, etc.). These include but are not limited to the following:
 - 1. The date of each inspection or observation, where it was determined by the Permittee that it was necessary to implement the control measures in the Fugitive Dust Control Program.
 - 2. The dates the control measures were implemented.
 - 3. A log recording incidents when control measures were not carried out as scheduled or were not fully implemented and incidents when additional control measures were carried out, with description of each such incident and explanation. This log shall address any adjustments to the scheduling of control measures made by the Permittee due to weather conditions that either acted to reduce or increase the level of potential

dust, such as precipitation or extended periods of dry weather.

- vii. A maintenance and repair log for the affected emission unit and/or control equipment, listing each activity performed with date. This requirement includes the landfill cover inspection and repair requirement in Condition 7.1.5(e) and 7.1.8(a)(i)(E).
- viii. Up-to-date, readily accessible continuous records of the landfill flow to the control system (Monthly and annual). Annual landfill gas usage shall be determined on a calendar year basis. Each month based on the current month of record's usage plus the usage for the preceding 11 months.
- ix. Operating hours for each affected emission unit.
- x. The Permittee shall maintain records of NO_x, CO, SO₂, PM, VOM, and HAPs emissions of the landfill and the gas-to-energy facility (tons/month and tons/year), with supporting documentation and calculations.

Note: For the emissions of the landfill, emission data shall be compiled on at least a quarterly basis. For the emissions from the gas-to-energy facility, the Permittee may obtain a copy of the records from the operator of the gas-to-energy facility, with supporting documentation and calculations, on at least a semi-annual basis.

- b. NSPS 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills:
 - i. Except as provided in Condition 7.1.5(a)(i)(A) and (B) and 40 CFR 60.752(b)(2)(i)(B), if the MSW landfill becomes subject to the provisions of Condition 7.1.5(a) and 40 CFR 60.752(b), the Permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered Condition 7.1.5(a) and 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. [40 CFR 60.758(a)]
 - ii. Except as provided in Condition 7.1.5(a)(i)(A) and (B) and 40 CFR 60.752(b)(2)(i)(B), if the MSW landfill becomes subject to the control requirements under Condition 7.1.5(a)(ii) and 40 CFR 60.752(b)(2)(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 7.1.5(a)(ii) and 40 CFR 60.752(b)(2)(ii) shall include: [40 CFR 60.758(b)(1)]
 - 1. The maximum expected gas generation flow rate as calculated in 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 7.1.5(a)(iii) and 40 CFR 60.752(b)(2)(iii) through the use of an enclosed combustion device other than a boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts shall include: [40 CFR 60.758(b)(2)]
 - 1. The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test. [40 CFR 60.758(b)(2)(i)]
 - 2. The percent reduction of NMOC determined as specified in Condition 7.1.5(a)(iii)(B) and 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 Condition 7.1.5(a)(iii)(A) and 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 Condition 7.1.5(a)(ii)(A)(2) and 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(a)(iv) and 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. [40 CFR 60.758(c)]

A. The following constitute exceedances that shall be recorded and reported under Condition 7.1.10(CFR 60.757(f): [40 CFR 60.758(c)(1)]

1. For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28°C below the average combustion temperature during the most recent performance test at which compliance with 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 40 CFR 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent. [40 CFR 60.758(c)(4)]

- iv. Except as provided in Condition 7.1.5(a)(ii)(A)(2) and 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) and 40 CFR 60.755(b). [40 CFR 60.758(d)(1)]
 - B. Readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii). [40 CFR 60.758(d)(2)]
- v. Except as provided in Condition 7.1.5(a)(ii)(A)(2) and 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 Condition 7.1.5(b) and 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 below and in 40 CFR 60.755(c)(4)(i) through (v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of Condition 7.1.5(b)(iv) and 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) and 40 CFR 60.755(c)(4)(v) 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) and 40 CFR 60.755(c)(4)(v) 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) or (C) and 40 CFR 60.755(c)(4)(ii) or (iii) shall be re-monitored 1 month from the initial exceedance. If the 1-month re-monitoring 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 re-monitoring shows an exceedance, the actions specified in Condition 7.1.9(b)(iv)(C) or (E) and 40 CFR 60.755(c)(4)(iii) or (v) 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 Illinois EPA 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

- i. For all asbestos-containing waste material received, the owner or operator of the active waste disposal site shall 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)(i)]
 - A. The name, address, and telephone number of the waste generator.
 - B. The name, address, and telephone number of the transporter(s).
 - C. The quantity of the asbestos-containing waste material in cubic meters (cubic yards).
 - D. The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers.
 - E. The date of the receipt.
- ii. 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)]

d. NESHAP 40 CFR 63, Subpart AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills

The Permittee shall keep records as specified in 40 CFR part 60, Subpart WWW (See Conditions 7.1.9(b)), and the general provisions of 40 CFR Part 60 and 63 as shown in Table 1 of 40 CFR 63, Subpart AAAA. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports specified 40 CFR 63, Subparts A and AAAA. These records shall include but are not limited to the following: [40 CFR 63.1980(a) & (b)]

i. General Records

The Permittee shall maintain relevant records for such source of [40 CFR 60.7(b) and 63.10(b)]

- A. The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

- B. The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;
- C. All required maintenance performed on the air pollution control and monitoring equipment;
- D. Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see 40 CFR 63.6(e)(3));
- E. All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see 40 CFR 63.6(e)(3)) when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist", or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);
- F. All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
- G. All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
- H. All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
- I. All CMS calibration checks;
- J. All adjustments and maintenance performed on CMS;

- K. All documentation supporting initial notifications and notifications of compliance status under 40 CFR 60.7 and 63.9.
- ii. Additional recordkeeping requirements for sources with continuous monitoring systems. In addition to complying with the requirements specified in 40 CFR 63.10(b)(1) and (b)(2), the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of: [40 CFR 63.10(c)]
 - A. All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods); [40 CFR 63.10(c)(1)]
 - B. The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks; [40 CFR 63.10(c)(5)]
 - C. The date and time identifying each period during which the CMS was out of control, as defined in 40 CFR 63.8(c)(7); [40 CFR 63.10(c)(6)]
 - D. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source; [40 CFR 63.10(c)(7)]
 - E. The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source; [40 CFR 63.10(c)(8)]
 - F. The nature and cause of any malfunction (if known); [40 CFR 63.10(c)(10)]
 - G. The corrective action taken or preventive measures adopted; [40 CFR 63.10(c)(11)]
 - H. The nature of the repairs or adjustments to the CMS that was inoperative or out of control; [40 CFR 63.10(c)(12)]

- I. The total process operating time during the reporting period; [40 CFR 63.10(c)(13)] and
- J. All procedures that are part of a quality control program developed and implemented for CMS under 40 CFR 63.8(d). [40 CFR 63.10(c)(14)]

In order to satisfy the requirements of 40 CFR 63.10(c)(10) through (c)(12) and to avoid duplicative recordkeeping efforts, the owner or operator may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e), provided that such plan and records adequately address the requirements of 40 CFR 63.10(c)(10) through (c)(12).

7.1.10 Reporting Requirements

a. Reporting of Deviations

The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of the affected MSW 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:

- i. Operation of the affected MSW landfill in excess of the limits specified in Conditions 7.1.5 and 7.1.6 within 30 days of such occurrence.
 - A. Identification of the limit that may have been exceeded.
 - B. Duration of the possible exceedance.
 - C. An estimate of the amount of emissions in excess of the applicable standard.
 - D. A description of the cause of the possible exceedance.
 - E. When compliance was reestablished.

b. General Reporting

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

- i. A summary of exceedances of the limits in Conditions 7.1.5 and 7.1.6, if any, which require notification to the Compliance Section in accordance with Condition 7.1.10(a).
- ii. All surface or subsurface landfill fires and/or significant landfill subsurface oxidation events shall be reported to Illinois EPA CES by telephone within 24 hours.

Reportable conditions that may be characteristic of a reportable event includes, but is not limited, to the following:

- A. Substantial landfill settlement over a short period of time that is not indicative of subsurface erosion.
- B. Visual emissions of smoke or vapor from the landfill or detection of a smoldering odor emanating from the gas extraction system or landfill.
- C. Elevated levels of CO in excess of 500 parts per million (ppm).
- D. Combustion residue in extraction wells or headers.
- E. Increase in gas temperature in the extraction system (above 140°F).
- D. Subsurface temperatures in excess of 170°F.
- E. Melting or failure of landfill gas extraction system components due to elevated temperatures.

The telephone report should be followed by a written report within seven days. The report shall include a report of conditions at the landfill that may be indicative of a significant landfill subsurface oxidation event; planned follow-up (i.e., additional sampling, monitoring, etc...), planned corrective action if warranted; and copies of all records indicating temperature, methane, oxygen, and carbon dioxide levels temperature and CO levels in gas collection wells surrounding the area of the suspected significant landfill subsurface oxidation event or landfill fire.

- c. 40 CFR 60 Subparts WWW and 40 CFR 63 Subpart AAAA

The Permittee is required provide reports as specified in the general provisions of 40 CFR Part 60 and Part 63 (See

Table 1 of 40 CFR 63 Subpart AAAA). Applicable reports include the SSM plan reports.

In this case, reportable exceedances and deviations, pursuant to 40 CFR 60 Subparts WWW and 40 CFR 63 Subpart AAAA, are defined under 40 CFR 60.758(c) and 40 CFR 63.1965 and 63.1990. [40 CFR 60.757 and 40 CFR 63.1980]

- i. The Permittee must submit the annual report described in 40 CFR 60.757(f) every 6 months. [40 CFR 63.1980(a)] The report shall include but is not limited to the following:
 - A. Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d). [40 CFR 60.757(f)(1)]
 - B. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756. [40 CFR 60.757(f)(2)]
 - C. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating. [40 CFR 60.757(f)(3)]
 - D. All periods when the collection system was not operating in excess of 5 days. [40 CFR 60.757(f)(4)]
 - E. The location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month. [40 CFR 60.757(f)(5)]
 - F. The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.755(a)(3), (b), and (c)(4). [40 CFR 60.757(f)(5)]
- ii. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise

nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]

- iii. The Permittee shall submit a landfill 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)]

In this case, landfill closure refers to the cessation of waste acceptance at the source and not the closing of individual cells or areas at the source.

- iv. The Permittee shall submit an equipment removal report to the Illinois EPA 30 days prior to removal or cessation of operation of the control equipment. [40 CFR 60.757(e)]
 - A. The equipment removal report shall contain all of the following items: [40 CFR 60.757(e)(1)]
 - 1. A copy of the closure report submitted in accordance with paragraph (d) of this section;
 - 2. A copy of the initial performance test report demonstrating that the 15 year minimum control period has expired; and
 - 3. Dated copies of three successive NMOC emission rate reports demonstrating that the landfill is no longer producing 50 megagrams or greater of NMOC per year.
 - B. The Illinois EPA may request such additional information as may be necessary to verify that all of the conditions for removal in 40 CFR 60.752(b)(2)(v) have been met. [40 CFR 60.757(e)(2)]

- v. The Permittee shall include the following information with the initial performance test report required under 40 CFR 60.8: [40 CFR 60.757(g)]
 - A. A diagram of the collection system showing collection system positioning including all wells, horizontal collectors, surface collectors, or other gas extraction devices, including the locations of any areas excluded from collection and the proposed sites for the future collection system expansion; [40 CFR 60.757(g)(1)]
 - B. The data upon which the sufficient density of wells, horizontal collectors, surface collectors, or other gas extraction devices and the gas mover equipment sizing are based; [40 CFR 60.757(g)(2)]
 - C. The documentation of the presence of asbestos or nondegradable material for each area from which collection wells have been excluded based on the presence of asbestos or nondegradable material; [40 CFR 60.757(g)(3)]
 - D. The sum of the gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area; [40 CFR 60.757(g)(4)]
 - E. The provisions for increasing gas mover equipment capacity with increased gas generation flow rate, if the present gas mover equipment is inadequate to move the maximum flow rate expected over the life of the landfill; [40 CFR 60.757(g)(5)] and
 - F. The provisions for the control of off-site migration. [40 CFR 60.757(g)(6)]
- d. NESHAP 40 CFR 61 Subpart M: Handling Procedures and Control Measures for the Disposal of ACWM
 - i. Report in writing to the Illinois EPA, Compliance Section and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), by the following working day, the presence of improperly enclosed or uncovered ACWM, or any asbestos-containing waste material not sealed in leak-tight containers. A copy of the waste shipment records, required under 40 CFR 61.154(e)(1) (See Condition

7.1.10(b)(i)), shall be submitted along with the report. [40 CFR 61.154(e)(1)(iv)]

- ii. As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the signed waste shipment record to the waste generator. [40 CFR 61.154(e)(2)]
- iii. Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the Illinois EPA, Compliance Section and, if different, the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record). The report shall describe the discrepancy and attempts to reconcile it, and it shall include a copy of the waste shipment records, required under 40 CFR 61.154(e)(1) (See Condition 7.1.10(b)(i)). [40 CFR 61.154(e)(3)]
- iv. Submit to the Illinois EPA, upon closure of the facility, a copy of records of asbestos waste disposal locations and quantities. [40 CFR 61.154(h)]
- v. Notify the Illinois EPA in writing at least 45 days prior to excavating or otherwise disturbing any asbestos-containing waste material that has been deposited at a waste disposal site and is covered. If the excavation will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Illinois EPA at least 10 working days before excavation begins and in no event shall excavation begin earlier than the date specified in the original notification. Include the following information in the notice: [40 CFR 61.151(d) or 40 CFR 61.154(j)]
 - A. Scheduled starting and completion dates.
 - B. Reason for disturbing the waste.
 - C. Procedures to be used to control emissions during the excavation, storage, transport, and ultimate disposal of the excavated asbestos-containing waste material. If deemed necessary, the Illinois EPA or USEPA may require changes in the emission control procedures to be used.

- D. Location of any temporary storage site and the final disposal site.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

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

- a. The Permittee is authorized to change disposal locations and the location of service and haul roads within the permitted landfill area and to perform maintenance upon landfill cover and the above referenced service and haul roads provided that the Permittee complies with the applicable requirements of 35 IAC Subtitle G: Waste Disposal and the particulate matter limitations cited in Condition 5.3.2.
- b. The Permittee is authorized to implement alternative waste disposal practices (e.g., compaction methods, cover systems, etc...) provided that the Permittee complies with the applicable requirements of 35 IAC Subtitle G: Waste Disposal, the requirements of this permit, any applicable air regulations, and provided that these practices do not meet the definition of a "modification" as defined in 35 IAC 201.102.

7.1.12 Compliance Procedures

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

- a. For the purpose of estimating un-controlled methane, NMOC, VOM, and HAP emission limitations shown in Condition 5.6, emissions may be calculated based upon the monitoring, recordkeeping, and reporting requirements in Conditions 7.1.8, 7.1.9, and 7.1.10; the USEPA Landfill Gas Emissions Model (See <http://www.epa.gov/ttn/chief> and AP-42, Chapter 2.4) and the control equipment efficiencies shown in AP-42, Chapter 2.4. The Permittee is allowed to use site-specific NMOC concentration and/or methane generation rate constant (k) determined through the procedures shown 40 CFR 60.754(a) and/or NMOC concentration, methane generation rate constant (k) and/or methane generation potential (Lo) approved by USEPA or Illinois EPA. In addition, the Permittee is allowed to use site specific HAP and SO₂ (i.e., sulfur concentration) emissions data recorded during landfill gas testing provided that full documentation and emissions calculations data is provided as part of the

emission report. It should be noted that approval must be made in writing for any changes made to standard USEPA methods.

- b. Landfill Operations PM & PM₁₀ emissions shall be calculated based upon the following emission factors and operating data:
 - i. For the purpose of estimating fugitive PM and PM₁₀ emissions from the paved roadways at the source, the emission factors and formulas in Sections 13.2.1 of AP-42, Volume I, Fifth Edition, Supplement D, October, 1997 or most recent version of AP-42 are acceptable.
 - ii. For the purpose of estimating fugitive PM and PM₁₀ emissions from the unpaved roadways at the source, the emission factors and formulas in Sections 13.2.2 of AP-42, Volume I, Fifth Edition, Supplement E, September, 1998 or most recent version of AP-42 are acceptable.
 - iii. For the purpose of estimating fugitive PM and PM₁₀ emissions from grading, compaction, and daily and final cover activities at the source, the emission factors and formulas in Sections 13.2.3 of AP-42, Volume I, Fifth Edition, or most recent version of AP-42 are acceptable. Annual emissions shall be determined from the total of 12 months of data.

$$EF = \frac{5.7 (s)^{1.2}}{(M)^{1.3}} = 3.94 \text{ lb/hr}$$

Where:

EF = Emission Factor

M = material moisture content (%) (Default 7.9%)

s = material silt content (%) (Default 6.9%)

PM & PM₁₀ (tons/month) = EF x (1-Control%)

Control% = Percent Control

7.2 Gasoline Dispensing Facility

7.2.1 Description

Gasoline is dispensed to motor vehicles and other equipment at the source. The affected source includes each gasoline cargo tank during the delivery of product to a gasoline dispensing facility, the gasoline storage tank (e.g., the five hundred fifty (550) gallon gasoline storage tank) and the equipment used for the refueling of motor vehicles.

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

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Date Constructed	Emission Control Equipment
02	Gasoline Dispensing Facility	--	--

7.2.3 Applicable Provisions and Regulations

a. The "affected gasoline dispensing facility" for the purpose of these unit-specific conditions, is described in Conditions 7.2.1 and 7.2.2.

b. Gasoline Storage Tank

i. 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, submerged fill, or an equivalent device approved by the Agency according to the provisions of 35 Ill. Adm. Code 201 or unless such tank is a pressure tank as described in Section 215.121(a) or is fitted with a recovery system as described in Section 215.121(b)(2). [35 IAC 215.122(b)]

Exception: If no odor nuisance exists the limitations of this Section shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F). [35 IAC 215.122(c)]

ii. No person shall cause or allow the transfer of gasoline from any delivery vessel into any stationary tank at gasoline dispensing operation, unless such tank is equipped with a submerged loading pipe. [35 IAC 215.583(a)(1)]

- c. The affected gasoline dispensing facility is subject to 40 CFR 63 Subpart CCCCCC - National Emission Standards For Hazardous Air Pollutants For Source Category: Gasoline Dispensing Facilities (GDF).
 - i. Applicability
 - A. The affected source to which 40 CFR 63 Subpart CCCCCC applies is each GDF that is located at an area source (See Condition 5.1.3). The affected source includes each gasoline cargo tank during the delivery of product to a GDF and also includes each storage tank. [40 CFR 63.11111(a)]
 - B. If the GDF has a monthly throughput of less than 10,000 gallons of gasoline, it must comply with the requirements in Condition 7.2.5(b)(i) and 40 CFR 63.11116. [40 CFR 63.11111(b)]
 - C. If the GDF has a monthly throughput of 10,000 gallons of gasoline or more, it must comply with the requirements in Condition 7.2.5(b)(ii) and 40 CFR 63.11117. [40 CFR 63.11111(c)]
 - D. If the GDF has a monthly throughput of 100,000 gallons of gasoline or more, it must comply with the requirements in 40 CFR 63.11118. [40 CFR 63.11111(d)]
 - E. Upon request by the Illinois EPA, the Permittee shall demonstrate that their average monthly throughput is less than the 10,000-gallon or the 100,000-gallon threshold level, as applicable. [40 CFR 63.11111(e)]
 - ii. Parts of the GDF covered by 40 CFR 63 Subpart CCCCCC
 - A. The emission units to which 40 CFR 63 Subpart CCCCCC applies are gasoline storage tanks and associated equipment components in vapor or liquid gasoline service at new, reconstructed, or existing GDF that meet the criteria specified in Condition 7.2.3(c)(i) and 40 CFR 63.11111. Pressure/Vacuum vents on gasoline storage tanks and the equipment necessary to unload product from cargo tanks into the storage tanks at GDF are covered emission sources. The equipment used for the refueling of motor vehicles is not covered by 40 CFR 63 Subpart CCCCCC. [40 CFR 63.11112(a)]
 - B. At the time of issuance of this permit, the affected GDF is considered to be an existing

affected source since it commenced construction on the affected GDF before November 9, 2006 and it has not been reconstructed pursuant to the criteria for reconstruction defined in 40 CFR 63.2. [40 CFR 63.11112(d)]

- iii. As an existing affected source, the Permittee must comply with the standards in 40 CFR 63 Subpart CCCCCC no later than January 10, 2011. [40 CFR 63.11113(b)]
- iv. Gasoline dispensing facility (GDF) means any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle. [40 CFR 63.11132]

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected gasoline storage tank is exempt from the provisions of 40 CFR 60 Subpart K, Ka and Kb because the affected gasoline storage tank has a design capacity of less than 75 m³ (19,812.9 gal). [40 CFR 60.110(a), 60.110a, and 60.110b(c)]
- b. The affected gasoline storage tank is not subject to the limitations of 35 IAC 215.121, Storage Containers, because the material stored in the affected gasoline storage tank has a maximum true vapor pressure of less than 2.5 psia and the tank design capacity is less than 151 m³ (40,000 gal). [35 IAC 215.121]
- c. The affected gasoline storage tank is not subject to the requirements of 35 IAC 215.123(b) - Petroleum Liquid Storage Tanks, because the requirements do not apply to stationary storage tanks with a capacity less than 151.42 m³ (40,000 gal). [35 IAC 215.123(a)(2)]
- d. The affected gasoline storage tank is not subject to the vapor control system requirements of 35 IAC 215.583(a)(2), (c) and (d), because the tank has a capacity of less than 575 gallons. [35 IAC 215.583(b)(3)]
- e. The affected gasoline dispensing facility is not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected gasoline dispensing facility is subject to a NESHAP proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i), See Condition 7.2.3(c).

7.2.5 Control Requirements and Work Practices

- a. i. The affected gasoline storage tank shall be equipped and operated with a submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA, pursuant to 35 IAC 215.122(b) and/or 215.583(a)(1) (See Condition 7.1.3(b)).

- ii. "Submerged loading pipe" means, for purposes of 35 Ill. Adm. Code 215, any loading pipe the discharge opening of which is entirely submerged when the liquid level is 6 inches above the bottom of the tank. When applied to a tank which is loaded from the side, "submerged loading pipe" means any loading pipe the discharge of which is entirely submerged when the liquid level is 18 inches or two times the loading pipe diameter whichever is greater, above the bottom of the tank. The definition shall also apply to any loading pipe which is continuously submerged during loading operations. [35 IAC 211.6470]

Note: As of the issue date of this permit, the Illinois EPA has not approved the use of other equivalent equipment in lieu of a submerged loading pipe or submerged loading fill.

- b. 40 CFR 63 Subpart CCCCCC--National Emission Standards For Hazardous Air Pollutants For Source Category: Gasoline Dispensing Facilities.

As applicable, the Permittee must comply with the following:

- i. Requirements For Gasoline Dispensing Facilities With Monthly Throughput Of Less Than 10,000 Gallons Of Gasoline [40 CFR 63.11116]
 - A. The Permittee must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
 - 1. Minimize gasoline spills;
 - 2. Clean up spills as expeditiously as practicable;
 - 3. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use;
 - 4. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.
 - B. The Permittee is not required to submit notifications or reports, but the Permittee must have records available within 24 hours of

a request by the Illinois EPA to document gasoline throughput.

- C. The Permittee must comply with the requirements of 40 CFR 63 Subpart CCCCCC by the applicable dates specified in 40 CFR 63.11113. Specifically, as an existing affected source, the Permittee must comply with the standards in this 40 CFR 63 Subpart CCCCCC no later than January 10, 2011. [40 CFR 63.11113(b)]
- ii. Requirements For Facilities With Monthly Throughput Of 10,000 Gallons Of Gasoline Or More. [40 CFR 63.11117]
- A. The Permittee must comply with the requirements in 40 CFR 63.11116(a) (See Condition 7.2.5(b)(i)(A).
 - B. Except as specified in Condition 7.2.5(b)(ii)(C) and 40 CFR 63.11117(c), the Permittee must only load gasoline into storage tanks at the facility by utilizing submerged filling, as defined in 40 CFR 63.11132, and as specified below and in 40 CFR 63.11117 (b)(1) or (b)(2).
 - 1. Submerged fill pipes installed on or before November 9, 2006, must be no more than 12 inches from the bottom of the storage tank.
 - 2. Submerged fill pipes installed after November 9, 2006, must be no more than 6 inches from the bottom of the storage tank.
 - C. Gasoline storage tanks with a capacity of less than 250 gallons are not required to comply with the submerged fill requirements in Condition 7.2.5(b)(ii)(B) and 40 CFR 63.11117(b), but must comply only with all of the requirements in Condition 7.2.5(b)(i) and 40 CFR 63.11116.
 - D. The Permittee must have records available within 24 hours of a request by the Illinois EPA to document gasoline throughput.
 - E. The Permittee must submit the applicable notifications as required under 40 CFR 63.11124(a).

It should be noted that, pursuant to 40 CFR 63.11124(a)(3), the Permittee is not required to submit an Initial Notification or a Notification of Compliance Status under 40 CFR 63.11124(a)(1) or (a)(2), because the requirements in 35 IAC 215.122(b) and 215.583(a)(1) (i.e., Conditions 7.2.3(b) and 7.2.5(a)) are considered to be an enforceable State rules. Therefore, Condition 7.2.5(b)(ii)(E) is not applicable. [40 CFR 63.11124(a)(3)]

7.2.6 Production and Emission Limitations

Gasoline and or gasoline blends shall be the only material accepted or dispensed at the GDF.

7.2.7 Testing Requirements

Testing requirements are not set for the affected gasoline dispensing facility.

7.2.8 Monitoring Requirements

The Permittee shall inspect and/or verify that the gasoline storage tank is being filled utilizing a permanent submerged loading pipe or submerged fill, to insure compliance with the operating requirements of Conditions 7.2.3(b) and 7.2.5(a) and to verify that submerged loading pipe or submerged fill is in place and operating correctly. Such inspections shall be performed either monthly or each time that the tank is filled.

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected gasoline dispensing facility to demonstrate compliance with Conditions 5.6.1, 7.2.3, 7.2.5, and 7.2.8 pursuant to Section 39.5(7)(b) of the Act:

- a. Design information for the gasoline storage tank showing the presence of a submerged loading pipe or submerged fill;
- b. Maintenance, repair, and inspection records for the gasoline storage tank, i.e., inspection, repair or replacement of the submerged loading pipe or submerged fill, overall activities related to gasoline cleanups, operation procedures, ...etc.;
- c. The throughput of the affected gasoline dispensing facility, gallon per month (gal/mo) and gallon per year (gal/yr); and

- d. The annual VOM emissions from the affected storage tanks (as defined by Condition 7.2.3(a)) based on the material stored, the tank throughput, and the applicable emission factors and formulas with supporting calculations.

7.2.10 Reporting Requirements

a. Reporting of Deviations

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

- i. Any storage of gasoline in an affected tank that is not in compliance with the submerged loading pipe or submerged fill requirements (due to absence of the features required by Conditions 7.2.3(b) and 7.2.5(a)), within 5 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.
- ii. Any storage of gasoline in an affected tank that is out of compliance with the control requirements (Conditions 7.2.3(b) and 7.2.5(a)) due to damage, deterioration, or other condition of the tank, within 30 days of becoming aware of the non-compliance status. This notification shall include a description of the event, the cause for the non-compliance, actions taken to correct the non-compliance, and the steps to be taken to avoid future non-compliance.
- iii. Any exceedance of the operational and emissions limitations in Conditions 7.2.3, 7.2.5, 7.2.6, and 7.2.8 within 30 days of such occurrence.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected gasoline dispensing facility.

7.2.12 Compliance Procedures

- a. Compliance with Conditions 7.2.5 is addressed by the inspections, records and reports required in Conditions 7.2.8, 7.2.9 and 7.2.10.

b. Compliance with the emission limit in Condition 5.6 is addressed by the records and reports required in Conditions 7.2.9 and 7.2.10 and emission factors and calculation procedures based on the following:

- i. For the purpose of estimating VOM emissions from the affected gasoline storage tank, the Permittee shall use the emission calculation procedures in USEPA's AP-42 - Chapter 7.1 - Organic Liquid Storage Tanks and/or the USEPA's TANKS software program.
- ii. For the purpose of estimating VOM emissions from the affected gasoline dispensing operation, the Permittee shall use the methods and procedures in USEPA's AP-42 - Chapter 5.2 - Transportation And Marketing Of Petroleum Liquids.

	lb/10 ³ gal	
	<u>Throughput</u>	
Vehicle Refueling Operations	11.0	Table 5.2-7
Spillage	0.7	Table 5.2-7

Where:

$$\text{Total VOM Emissions (lb)} = \text{Throughput gasoline (gallon)} \times (11.0 + 0.7) \times 10^{-3}$$

7.3 RICE Engines (Subject to NESHAP - 40 CFR 63 Subpart ZZZZ)

7.3.1 Description

The reciprocating internal combustion engines (RICE) are gasoline and diesel fired process emission units used to provide power to various components at the source. These include a tarping machine, light towers, water pump, compressors, host, tipping machines, vacuum unit, pressure washer, and welder.

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

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description (Model Year)	Power Output	Fuel Type	Emission Control Equipment
Tarpomatic	CAT 3003 (2005)	23.5 HP	Diesel	None
Amida Light Tower	Kubota D905 (2005)	10.5 Hp	Diesel	None
Ingersoll-Rand Light Tower	Lister-Pelter (1987)	8.0 KW	Diesel	None
Gorman-Rupp (6" Water Pump) Md# 16CZ-4039D	Engine Model #4039D F001 (1993)	80 HP	Diesel	None
Atlas Air Compressor	John Deere 4024TF270C (2006)	36 KW	Diesel	None
Hotsy 980A	(1993) with Diesel Heater	5 HP/heater is 385,000 BTU	Diesel	None
Columbia Tipper # 1	(1995)	115 HP	Diesel	None
Columbia Tipper #2	(1999)	120 HP	Diesel	None
MadVac Model 61D	Kubota 2B600 (1999)	12.5 HP	Diesel	None
Hot & Mighty Pressure Washer Model# HDC-3005-OK6G	Kohler CH185 (2007)	18 HP/heater is 400,000 BTU	Gasoline	None
Atlas Copco Air Compressor	Kohler	12 HP	Gasoline	None
Miller Welder	Teledyne Continental F-163 (1981)	3 kVA (<12 HP)	Gasoline	None

7.3.3 Applicable Provisions and Regulations

- a. The "affected engines" for the purpose of these unit-specific conditions, are diesel engines described in Conditions 7.3.1 and 7.3.2.
- b. Pursuant to 35 IAC 212.123,
 - i. 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.
 - ii. The emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 1000 ft radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c.
 - i. Pursuant to 35 IAC 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.
- d. The affected engines are subject to 40 CFR Part 63 Subpart ZZZZ--National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines
 - i. The source is subject 40 CFR 63 Subpart ZZZZ since the Permittee owns or operates a stationary RICE located at an area source (See Condition 5.1.3). [40 CFR 63.6585]
 - ii. A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition. [40 CFR 63.6585(a)]
 - iii. An area source of HAP emissions is a source that is not a major source (See Condition 5.1.3). [40 CFR 63.6585(c)]

- iv. The affected engines are classified as being existing based upon the following:
 - A. For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006. [40 CFR 63.6590(a)(1)(iii)]
 - B. A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE. [40 CFR 63.6590(a)(1)(iv)]
- v. Based upon the affected engines being existing, the affected units do not have to meet the requirements of 40 CFR 63 Subparts ZZZZ and/or A. Specifically, they are not required to comply with any of the emission reduction, monitoring, recordkeeping, and reporting requirements of 40 CFR 63 Subparts ZZZZ and/or A. This includes the filing of an initial notification pursuant to these subparts. [40 CFR 63.6590(b)(3)]
- vi. An affected emission unit that is a new or reconstructed stationary RICE located at an area source, must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines or 40 CFR Part 60 Subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6590(c)]

7.3.4 Non-Applicability of Regulations of Concern

- a. The affected diesel engines are not subject to the New Source Performance Standards (NSPS) for Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII, because the Permittee did not commence construction (date that construction commences is the date the engine is ordered by the Permittee) of the affected diesel engines after July 11, 2005 where the affected diesel engines were manufactured after April 1, 2006 and are not fire pump engines, pursuant to 40 CFR 60.4200(a)(2)(i).
- b. This permit is issued based on the spark ignition internal combustion engines (e.g., gasoline) at the source not being subject to 40 CFR Part 60 Subpart JJJJ - Standards Of Performance For Stationary Spark Ignition Internal Combustion Engines, because the affected spark ignition internal combustion engines have a maximum engine power

less than 500 HP and they were manufactured before July 1, 2008. [40 CFR 60.4230(a)(4)]

- c. The affected diesel engines (used as diesel generators) are not subject to the Acid Rain Program, 40 CFR 72, because the affected engines are non-utility units, as defined by 40 CFR 72.6(b)(8). Pursuant to 40 CFR 72.2, "utility unit" is defined as a unit owned or operated by a utility that serves a generator in any State that produces electricity for sale.
- d. The affected engines are not subject to 35 IAC 212.321 or 212.322, due to the unique nature of such units, a process weight rate can not be set so that such rules can not reasonably be applied, pursuant to 35 IAC 212.323.
- e. The affected engines are not subject to 35 IAC 216.121 because the affected engines are not fuel combustion units, as defined by 35 IAC 211.2470.
- f.
 - i. The affected engines are not subject to 35 IAC Part 217, Subpart Q: Stationary Reciprocating Internal Combustion Engines and Turbines, because the affected engines are not stationary reciprocating internal combustion engines listed in Appendix G of that Part, pursuant to 35 IAC 217.386.
 - ii. The affected engines are not subject to 35 IAC 217.141 because the affected engines are not fuel combustion units, as defined by 35 IAC 211.2470.
- f. The affected engines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected engines do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.3.5 Control Requirements and Work Practices

- a. The Permittee shall follow good operating practices for the affected diesel engines, including periodic inspection, routine maintenance and prompt repair of defects.
- b. Distillate fuel oil shall be the only fuel fired in the affected diesel engines.
- c. Gasoline shall be the only fuel fired in the affected spark ignition internal combustion engines (e.g., gasoline engines).
- c. The Illinois EPA shall be allowed to sample all fuels stored at the source.

7.3.6 Production and Emission Limitations

Production and emission limitations are not set for the affected diesel engines. However, there are source-wide production and emission limitations set forth in Condition 5.6.

7.3.7 Testing Requirements

- a.
 - i. Upon written request by the Illinois EPA, the Permittee shall have the opacity of the exhaust from the affected engine(s) tested during representative operating conditions as determined by a qualified observer in accordance with USEPA Test Method 9, as further specified below, pursuant to Section 39.5(7)(d) of the Act.
 - ii. Such testing shall be conducted for specific engine(s) within 70 calendar days of the request, or on the date engine(s) next operates, or on the date agreed upon by the Illinois EPA, whichever is later.
 - iii. The duration of opacity observations for each test shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the first 12 minutes of observations (two six-minute averages) are both less than 10.0 percent.
 - iv. The Permittee shall notify the Illinois EPA at least 7 days in advance of the date and time of these tests, in order to allow the Illinois EPA to witness testing. This notification shall include the name and employer of the qualified observer(s).
 - v. The Permittee shall promptly notify the Illinois EPA of any changes in the time or date for testing.
 - vi. The Permittee shall provide a copy of its observer's readings to the Illinois EPA at the time of testing, if Illinois EPA personnel are present.
 - vii. The Permittee shall submit a written report for this testing within 15 days of the date of testing. This report shall include:
 - A. Date and time of testing.
 - B. Name and employer of qualified observer.
 - C. Copy of current certification.
 - D. Description of observation conditions.
 - E. Description of diesel engine operating conditions.

- F. Raw data.
 - G. Opacity determinations.
 - H. Conclusions.
- b. i. In the event that the fuel oil supplier is unable to provide the sulfur content of the fuel oil supply for the affected diesel engines, the Permittee shall have the sulfur content of the oil supply to the affected diesel engines, in lbs/mmBtu, determined from an analysis of representative sample of the oil supply, as follows, pursuant to Section 39.5(7)(d) of the Act:
- A. From a sample taken no later than 90 days after first operating the affected diesel engines pursuant to this permit, provided, however, that if such sample is taken following operation of the affected diesel engines, the sample shall be taken prior to adding more oil to the storage tank.
 - B. From a sample taken no later than 30 days after acceptance of a shipment of fuel whose sulfur content would not meet Condition 7.3.3(c) based upon supplier data, provided however, that if the affected diesel engines are operated following acceptance of such a shipment, the sample shall be taken prior to adding a subsequent shipment of oil to the relevant storage tank.
 - C. From a sample taken no later than 30 days after a request for such a sample is made by the Illinois EPA, provided, however, that such sample shall be taken prior to adding more oil to the relevant storage tank.
- ii. Sampling and analysis, including that which forms the basis for the suppliers' data, shall be conducted using methods that would be acceptable under the federal New Source Performance Standards for Stationary Gas Turbines, 40 CFR 60.335(b)(2) and (c) or the federal Acid Rain Program, 40 CFR 75, Appendix D, Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units e.g., ASTM D4057-88 and ASTM D129-91.

Note: Condition 7.3.7(b)(ii) is for fuel testing methodology only, and is in no way intended to subject the source to those provisions.

7.3.8 Monitoring Requirements

- a. i. If an affected engine is routinely operated or exercised to confirm that the affected engine will operate when needed, the operation and opacity of the affected engine shall be formally observed by operating personnel for the affected engine or a member of Permittee's environmental staff on a regular basis to assure that the affected engine is operating properly, which observations shall be made at least every six months.
- ii. If an affected engine is not routinely operated or exercised, i.e., the time interval between operation of an affected engine is typically greater than six months, the operation and opacity of the affected engine shall be formally observed as provided above each time the Permittee carries out a scheduled exercise of the affected engine.
- iii. The Permittee shall also conduct formal observations of operation and opacity of an affected engine upon written request by the Illinois EPA. With the agreement of the Illinois EPA, the Permittee may schedule these observations to take place during periods when it would otherwise be operating the affected diesel engine.

Note: The "formally observation" required above is not intended to be a USEPA Test Method 9 opacity test, nor does the observation require a USEPA Test Method 9 certified observer. It is intended to be performed by personnel familiar with the operation of the affected engines who would be able to make a determination based from the affected engines who would be able to make a determination based from the observed opacity as to whether or not the affected diesel engine was running properly, and subsequently initiate a corrective action if necessary.

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for each affected diesel engine to demonstrate compliance with Conditions 5.6.1 and 7.3.3, pursuant to Section 39.5(7)(b) of the Act:

- a. i. An operating log for each affected diesel engine, which shall include the following information:
 - A. Information for each time the affected diesel engine is operated, with date, time, duration, and purpose (i.e., exercise or power service). Monthly and annual records of hours of

operation of each engine and total hours of operation.

- B. Information for the observations conducted pursuant to Condition 7.3.8(a) or 7.3.7(a), with date, time, personnel, and findings.
 - 1. The Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9 for an affected diesel engine that it conducts or that are conducted on its behalf by individuals who are qualified to make such observations for Condition 7.3.7(a). For each occasion on which such observations are made, these records shall include the identity of the observer, a description of the various observations that were made, the observed opacity, and copies of the raw data sheets for the observations.
 - 2. The Permittee shall keep records for all formal observations of opacity conducted pursuant to Condition 7.3.8(a). For each occasion on which observations are made, these records shall include the date, time, identity of the observer, a description of the various observations that were made, whether or not the affected diesel engine was running properly, and whether or not corrective action is necessary and was subsequently initiated.
- C. Information identifying any deviation from Condition 7.3.5(b).
 - ii. A maintenance and repair log for each affected diesel engine and associated equipment, listing activities performed with date. If applicable, this includes any reconstruction of an affected engine, as defined in 40 CFR 63.2.
 - iii. If applicable, records of compliance pursuant to Condition 7.3.3(d)(vi), i.e., 40 CFR Part 60 Subpart IIII, for compression ignition engines or 40 CFR Part 60 Subpart JJJJ, for spark ignition engines. [40 CFR 63.6590(c)]
 - iv. The Permittee shall keep records of good operating practices for each affected engine, as defined in Condition 7.3.5(a).

- b. Fuel usage for the affected engines:
 - i. Total usage of fuel oil and gasoline for the affected engines, gallons/month and gallons/year.
- c. The following records related to the sulfur content of the oil fuel supply and SO₂ emissions of the affected diesel engines:
 - i. Records for each shipment of fuel for the affected diesel engines, including date, supplier, quantity (in gallons), sulfur content, and whether the SO₂ emissions from the burning of such fuel would meet the standard in Condition 7.3.3(c).
 - ii. The Permittee shall maintain records of the sulfur content of the fuel oil supply to the affected diesel engines, based on the weighted average of material in the storage tank, or the sulfur content of the supply shall be assumed to be the highest sulfur content in any shipment in the tank.
- d. Emissions from each affected engines (i.e., NO_x, CO, SO₂, VOM, and PM) in tons/month and tons/year with supporting calculations and data as required by Condition 7.3.9.

7.3.10 Reporting Requirements

a. Reporting of Deviations

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

- i. Emissions of opacity and SO₂, from the affected engines in excess of the limits specified in Conditions 7.3.3 within 30 days of such occurrence.
- ii. Operation of the affected engines in noncompliance with the requirements specified in Condition 7.3.5 within 30 days of such occurrence.

b. Reporting of Construction and/or Reconstruction

If applicable, the Permittee shall comply with the reporting requirements of 40 CFR Part 60 Subpart IIII, for compression ignition engines or 40 CFR Part 60 Subpart JJJJ, for spark ignition engines and 40 CFR Part 60 Subpart A, for any new or reconstructed stationary RICE. This includes but is not limited to the following: [40 CFR 63.6590(c)]

- i. Notice of plans to reconstruct an affected engine, postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced. [40 CFR 60.15(d)]
- ii. Notifications as required pursuant to 40 CFR 60.4214(a) and/or 60.4245(c), of the date construction (or reconstruction as defined under 40 CFR 60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form. [40 CFR 60.7(a)(1)]

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

Operational flexibility is not set for the affected engines.

7.3.12 Compliance Procedures

- a. Compliance with the PM emission limitations of Conditions 7.3.3(b) is addressed by the requirements of Condition 7.3.5(a), the testing requirements in Condition 7.3.7(a), the monitoring requirements of Condition 7.3.8(a), the records required in Condition 7.3.9(a), and the reports required in Condition 7.3.10(a).
- b.
 - i. Compliance with the SO₂ emission limitation of Condition 7.3.3(c)(i) is addressed by the requirements of Condition 7.3.5, the testing requirements in Condition 7.3.7(b), and the records and reports required in Conditions 7.3.9(b) and (c) and 7.3.10(a).
 - ii. For this purpose, complete conversion of sulfur into SO₂ shall be assumed, e.g., SO₂ emissions in lb/mmBtu are twice the sulfur content of the fuel supply, in lb/mmBtu, using the following equation:

$$\text{SO}_2 \text{ ppm} = \frac{\text{Fuel sulfur content (lb/mmBtu)} \times 2 \times 1/64 \times 385.2 \times 1,000,000}{\text{Engine exhaust rate factor (scf/mmBtu)}}$$

Note: Stoichiometric combustion of distillate oil with the maximum available sulfur content, i.e., 1.0 percent, would result in an SO₂ concentration in the exhaust that is well below the 2000 ppm limit in Condition 7.3.3(c)(i), i.e., only about 500 ppm, based on 10,320 scf/mmBtu, the F-factor for oil in USEPA's Reference Method 19.

- c. Compliance with the emission limits in Conditions 5.6 are addressed by the records and reports required in Conditions 7.3.9 and 7.3.10 and the emission factors and formulas

listed below if suitable manufacture's emission rate data is not available:

- i. Emission factors for the affected gasoline engines:

<u>Pollutant</u>	Emission Factors	
	<u>(lb/mmBtu)</u>	<u>(lb/hp-hr)</u>
	Fuel Input	Power Output
VOM	2.10	0.015
PM	0.10	7.21×10^{-04}
SO ₂	0.084	5.91×10^{-04}
NO _x	1.63	0.011
CO	62.70	0.439

The heat content of gasoline shall be assumed to be 130,000 Btu/gal as per AP-42.

Emissions = Gasoline Usage x Heat Content of Gasoline x Emission Factor

The emission factors are for Gasoline And Diesel Industrial Engines from AP-42 Section 3.3 (dated 10/96).

- ii. Emission factors for the affected diesel engines up to 600 horsepower:

<u>Pollutant</u>	Emission Factors	
	<u>(lb/mmBtu)</u>	<u>(lb/hp-hr)</u>
	Fuel Input	Power Output
VOM	0.35	2.47×10^{-03}
PM	0.31	2.20×10^{-03}
SO ₂	0.29	2.05×10^{-03}
NO _x	4.41	0.031
CO	0.95	6.68×10^{-03}

Where S_{F0} represents the percent sulfur in the fuel oil. The heat content of distillate fuel oil shall be assumed to be 137,030 Btu/gal as per AP-42.

Emissions = Distillate Fuel Oil Usage x Heat Content of Fuel Oil x Emission Factor

The emission factors are for Gasoline And Diesel Industrial Engines from AP-42 Section 3.3 (dated 10/96).

- ii. Emission factors for the affected engines greater than 600 horsepower:

<u>Pollutant</u>	Emission Factors	
	<u>(lb/mmBtu)</u>	<u>(lb/hp-hr)</u>
	Fuel Input	Power Output
VOM	0.09	7.05×10^{-04}
PM	0.1	0.0007

<u>Pollutant</u>	<u>Emission Factors</u>	
	<u>(lb/mmBtu)</u>	<u>(lb/hp-hr)</u>
	<u>Fuel Input</u>	<u>Power Output</u>
SO ₂	1.01 x S _{F0}	8.09 x 10 ⁻⁰³ xS1
NO _x	3.2	0.024
CO	0.85	5.5 x 10 ⁻⁰³

Where S_{F0} represents the percent sulfur in the fuel oil. S1 = % sulfur in fuel oil. The heat content of distillate fuel oil shall be assumed to be 137,030 Btu/gal as per AP-42.

Emissions = Distillate Fuel Oil Usage x Heat Content of Fuel Oil x Emission Factor

The emission factors are for Large Stationary Diesel And All Stationary Dual-fuel Engines from AP-42 Section 3.4 (dated 10/96).

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 September 5, 2008 (the date of issuance of the proposed permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

8.3 Emissions Trading Programs

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

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

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

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test

methods), recordkeeping, reporting, or compliance certification requirements;

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

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods if applicable test methods are not specified by the applicable regulations or otherwise identified in the conditions of this permit.

Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Conditions 8.6.3 and 8.6.4.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

Reports summarizing required monitoring as specified in the conditions of this permit shall be submitted to the Illinois EPA

every six months as follows, unless more frequent submittal of such reports is required in Sections 5 or 7 of this permit [Section 39.5(7)(f) of the Act]:

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

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

8.6.2 Test Notifications

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

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

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The

test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

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

8.6.4 Reporting Addresses

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

- i. Illinois EPA - Air Compliance Unit

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

- ii. Illinois EPA - Air Quality Planning Section

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

iii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

iv. USEPA Region 5 - Air Branch

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

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

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

8.7 Title I Conditions

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

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

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

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

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

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

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

practices, or operations regulated or required under this permit;

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

9.4 Obligation to Comply with Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

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

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

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

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the

certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.

- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act and applicable regulations. [Section 39.5(7)(p)(i) of the Act] An example Certification by a Responsible Official is included as Attachment 1 to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

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

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

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

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed

description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

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

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

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

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

9.12.2 Reopening and Revision

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

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

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

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

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

9.14 Permit Expiration and Renewal

Upon the expiration of this permit, if the source is operated, it shall be deemed to be operating without a permit unless a timely and complete CAAPP application has been submitted for renewal of this permit. However, if a timely and complete application to renew this CAAPP permit has been submitted, the terms and all conditions of this CAAPP permit will remain in effect until the issuance of a renewal permit. [Section 39.5(5)(1) and (o) of the Act]

Note: Pursuant to Sections 39.5(5)(h) and (n) of the Act, upon submittal of a timely and complete renewal application, the permitted source may continue to operate until final action is taken by the Illinois EPA on the renewal application, provided, however, that this protection shall cease if the applicant fails to submit any additional information necessary to evaluate or take final action on the renewal

application as requested by the Illinois EPA in writing. For a renewal application to be timely, it must be submitted no later than 9 months prior to the date of permit expiration.

9.15 General Authority for the Terms and Conditions of this Permit

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

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

10.0 ATTACHMENTS

Attachment 1 Example Certification by a Responsible Official

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

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

Attachment 2 Emissions of Particulate Matter from Process Emission Units

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

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

where:

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

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

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

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

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

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

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

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

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

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

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

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

where:

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

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

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

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

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

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

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

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

Attachment 3 Compliance Assurance Monitoring (CAM) Plan

There are no specific emission units that require a CAM plan as identified in the Monitoring Requirements of Subsection 8 for each Section 7, Unit Specific Conditions for Specific Emission Units.

Attachment 4 Guidance

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

Guidance On Revising A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-revising.pdf

Guidance On Renewing A CAAPP Permit:

www.epa.state.il.us/air/caapp/caapp-renewing.pdf

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

www.epa.state.il.us/air/caapp/index.html

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

www.epa.state.il.us/air/caapp/199-caapp.pdf

www.epa.state.il.us/air/permits/197-fee.pdf

Attachment 5 - Summary of Emission Units

The following emission units are owned and operated by the Lee County Landfill (BOA I.D. No. 103020AAL).

Emission Unit	Description	Date Constructed	Emission Control Equipment
01	MSW Landfill	<p>Commenced Construction</p> <p>June 1998</p> <p>Operation Commenced</p> <p>November 1998</p> <p>BOA Expansion Permit</p> <p>November 30, 2006 (06020081)</p>	Gas to Energy Facility ¹
02	Gasoline Storage Tank	----	Submerged Loading

¹ Adjacent gas to energy plant owned and operated by Dixon/Lee Energy Partners, LLC (CAAPP Permit Application No.: 00070051 - BOA I.D. No. 103020ACJ).

The following emission units are owned by Dixon/Lee Energy Partners, LLC and operated by Illinois Electrical Generation Partners, LLC (CAAPP Permit Application No.: 00070051 - BOA I.D. No. 103020ACJ):

Emission Unit	Description	Emission Control Equipment
Engine/Generator 1	Jenbacher Landfill Gas Fired Gensets (Model JGC 320 GS-L.L.) ¹	None
Engine/Generator 2	Jenbacher Landfill Gas Fired Gensets (Model JGC 320 GS-L.L.) ¹	None
Engine/Generator 3	Jenbacher Landfill Gas Fired Gensets (Model JGC 320 GS-L.L.) ¹	None
Engine/Generator 4	Jenbacher Landfill Gas Fired Gensets (Model JGC 320 GS-L.L.) ¹	None
Engine/Generator 4	Jenbacher Landfill Gas Fired Gensets (Model JGC 320 GS-L.L.) ¹	None
--	Candlestick Flare ¹	None

¹ Landfill gas utilized in the above emission units is generated by Lee County Landfill (See CAAPP Permit No. 99090089 - BOA I.D. No. 103806AAL).

GPO Access e-CFR Data is current as of May 2, 2008

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=2ea5e40222ec4996e2aafc81eac94ea2&rgn=div6&view=text&node=40:12.0.1.1.1.9&idno=40>

Subpart AAAA—National Emission Standards for Hazardous Air Pollutants:
Municipal Solid Waste Landfills

Source: 68 FR 2238, Jan. 16, 2003, unless otherwise noted.

What This Subpart Covers

§ 63.1930 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills. This subpart requires all landfills described in §63.1935 to meet the requirements of 40 CFR Part 60, Subpart Cc or WWW and requires timely control of bioreactors. This subpart also requires such landfills to meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.

§ 63.1935 Am I subject to this subpart?

You are subject to this subpart if you meet the criteria in paragraph (a) or (b) of this section.

- (a) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:
- (1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.
 - (2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.
 - (3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to §60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW,

the Federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill.

- (b) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition, that includes a bioreactor, as defined in §63.1990, and that meets any one of the criteria in paragraphs (b)(1) through (3) of this section:
 - (1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.
 - (2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.
 - (3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³ and that is not permanently closed as of January 16, 2003.

§ 63.1940 What is the affected source of this subpart?

- (a) An affected source of this subpart is a MSW landfill, as defined in §63.1990, that meets the criteria in §63.1935(a) or (b). The affected source includes the entire disposal facility in a contiguous geographic space where household waste is placed in or on land, including any portion of the MSW landfill operated as a bioreactor.
- (b) A new affected source of this subpart is an affected source that commenced construction or reconstruction after November 7, 2000. An affected source is reconstructed if it meets the definition of reconstruction in 40 CFR 63.2 of subpart A.
- (c) An affected source of this subpart is existing if it is not new.

§ 63.1945 When do I have to comply with this subpart?

- (a) If your landfill is a new affected source, you must comply with this subpart by January 16, 2003 or at the time you begin operating, whichever is last.
- (b) If your landfill is an existing affected source, you must comply with this subpart by January 16, 2004.
- (c) If your landfill is a new affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.
- (d) If your landfill is an existing affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved

and effective State or tribal plan that applies to your landfill or by January 13, 2004, whichever occurs later.

- (e) If your landfill is a new affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements of §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.
- (f) If your landfill is an existing affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.

§ 63.1947 When do I have to comply with this subpart if I own or operate a bioreactor?

You must comply with this subpart by the dates specified in §63.1945(a) or (b) of this subpart. If you own or operate a bioreactor located at a landfill that is not permanently closed as of January 16, 2003 and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³, then you must install and operate a collection and control system that meets the criteria in 40 CFR 60.752(b)(2)(v) of part 60, subpart WWW, the Federal plan, or EPA approved and effective State plan according to the schedule specified in paragraph (a), (b), or (c) of this section.

- (a) If your bioreactor is at a new affected source, then you must meet the requirements in paragraphs (a)(1) and (2) of this section:
 - (1) Install the gas collection and control system for the bioreactor before initiating liquids addition.
 - (2) Begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. If you choose to begin gas collection and control system operation 180 days after achieving a 40 percent moisture content instead of 180 days after liquids addition, use the procedures in §63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent.
- (b) If your bioreactor is at an existing affected source, then you must install and begin operating the gas collection and control system for the bioreactor by January 17, 2006 or by the date your bioreactor is required to install a gas collection and control system under 40 CFR part 60, subpart WWW, the Federal plan, or EPA approved and effective State plan or tribal plan that applies to your landfill, whichever is earlier.
- (c) If your bioreactor is at an existing affected source and you do not initiate liquids addition to your bioreactor until later than

January 17, 2006, then you must meet the requirements in paragraphs (c)(1) and (2) of this section:

- (1) Install the gas collection and control system for the bioreactor before initiating liquids addition.
- (2) Begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. If you choose to begin gas collection and control system operation 180 days after achieving a 40 percent moisture content instead of 180 days after liquids addition, use the procedures in §63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent.

§ 63.1950 When am I no longer required to comply with this subpart?

You are no longer required to comply with the requirements of this subpart when you are no longer required to apply controls as specified in 40 CFR 60.752(b)(2)(v) of subpart WWW, or the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill.

§ 63.1952 When am I no longer required to comply with the requirements of this subpart if I own or operate a bioreactor?

If you own or operate a landfill that includes a bioreactor, you are no longer required to comply with the requirements of this subpart for the bioreactor provided you meet the conditions of either paragraphs (a) or (b).

- (a) Your affected source meets the control system removal criteria in 40 CFR 60.752(b)(2)(v) of part 60, subpart WWW or the bioreactor meets the criteria for a nonproductive area of the landfill in 40 CFR 60.759(a)(3)(ii) of part 60, subpart WWW.
- (b) The bioreactor portion of the landfill is a closed landfill as defined in 40 CFR 60.751, subpart WWW, you have permanently ceased adding liquids to the bioreactor, and you have not added liquids to the bioreactor for at least 1 year. A closure report for the bioreactor must be submitted to the Administrator as provided in 40 CFR 60.757(d) of subpart WWW.
- (c) Compliance with the bioreactor control removal provisions in this section constitutes compliance with 40 CFR part 60, subpart WWW or the Federal plan, whichever applies to your bioreactor.

Standards

§ 63.1955 What requirements must I meet?

- (a) You must fulfill one of the requirements in paragraph (a)(1) or (2) of this section, whichever is applicable:
 - (1) Comply with the requirements of 40 CFR part 60, subpart WWW.

- (2) Comply with the requirements of the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc.
- (b) If you are required by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in §§63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart.
- (c) For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with this subpart, except that all affected sources must comply with the SSM requirements in Subpart A of this part as specified in Table 1 of this subpart and all affected sources must submit compliance reports every 6 months as specified in §63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.
- (d) If you own or operate a bioreactor that is located at a MSW landfill that is not permanently closed and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m³, then you must meet the requirements of paragraph (a) and the additional requirements in paragraphs (d)(1) and (2) of this section.
- (1) You must comply with the general provisions specified in Table 1 of this subpart and §§63.1960 through 63.1985 starting on the date you are required to install the gas collection and control system.
- (2) You must extend the collection and control system into each new cell or area of the bioreactor prior to initiating liquids addition in that area, instead of the schedule in 40 CFR 60.752(b)(2)(ii)(A)(2).

General and Continuing Compliance Requirements

§ 63.1960 How is compliance determined?

Compliance is determined in the same way it is determined for 40 CFR part 60, subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. In addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop a written SSM plan according to the

provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

[68 FR 2238, Jan. 16, 2003, as amended at 71 FR 20462, Apr. 20, 2006]

§ 63.1965 What is a deviation?

A deviation is defined in §63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs (a) through (c) of this section.

- (a) A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded.
- (b) A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour.
- (c) A deviation occurs when a SSM plan is not developed or maintained on site.

[68 FR 2238, Jan. 16, 2003, as amended at 71 FR 20462, Apr. 20, 2006]

§ 63.1975 How do I calculate the 3-hour block average used to demonstrate compliance?

Averages are calculated in the same way as they are calculated in 40 CFR part 60, subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) of this section are not to be included in any average computed under this subpart:

- (a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
- (b) Startups.
- (c) Shutdowns.
- (d) Malfunctions.

Notifications, Records, and Reports

§ 63.1980 What records and reports must I keep and submit?

- (a) Keep records and reports as specified in 40 CFR part 60, subpart WWW, or in the Federal plan, EPA approved State plan or tribal plan that implements 40 CFR part 60, subpart Cc, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.

- (b) You must also keep records and reports as specified in the general provisions of 40 CFR part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.
- (c) For bioreactors at new affected sources you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(a)(2) of this subpart.
- (d) For bioreactors at existing affected sources, you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the compliance date specified in §63.1947(b) of this subpart, unless you have previously submitted a compliance report for the bioreactor required by 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State plan or tribal plan.
- (e) For bioreactors that are located at existing affected sources, but do not initiate liquids addition until later than the compliance date in §63.1947(b) of this subpart, you must submit the initial semiannual compliance report and performance tests results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(c) of this subpart.
- (f) If you must submit a semiannual compliance report for a bioreactor as well as a semiannual compliance report for a conventional portion of the same landfill, you may delay submittal of a subsequent semiannual compliance report for the bioreactor according to paragraphs (f)(1) through (3) of this section so that the reports may be submitted on the same schedule.
 - (1) After submittal of your initial semiannual compliance report and performance test results for the bioreactor, you may delay submittal of the subsequent semiannual compliance report for the bioreactor until the date the initial or subsequent semiannual compliance report is due for the conventional portion of your landfill.
 - (2) You may delay submittal of your subsequent semiannual compliance report by no more than 12 months after the due date for submitting the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) for the bioreactor. The report shall cover the time period since the previous semiannual report for the bioreactor, which would be a period of at least 6 months and no more than 12 months.
 - (3) After the delayed semiannual report, all subsequent semiannual reports for the bioreactor must be submitted every 6 months on the same date the semiannual report for the conventional portion of the landfill is due.

- (g) If you add any liquids other than leachate in a controlled fashion to the waste mass and do not comply with the bioreactor requirements in §§63.1947, 63.1955(c) and 63.1980(c) through (f) of this subpart, you must keep a record of calculations showing that the percent moisture by weight expected in the waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including leachate recirculation and other liquids addition and precipitation, and the mass of water removed through leachate or other water losses. Moisture level sampling or mass balances calculations can be used. You must document the calculations and the basis of any assumptions. Keep the record of the calculations until you cease liquids addition.
- (h) If you calculate moisture content to establish the date your bioreactor is required to begin operating the collection and control system under §63.1947(a)(2) or (c)(2), keep a record of the calculations including the information specified in paragraph (g) of this section for 5 years. Within 90 days after the bioreactor achieves 40 percent moisture content, report the results of the calculation, the date the bioreactor achieved 40 percent moisture content by weight, and the date you plan to begin collection and control system operation.

Other Requirements and Information

§ 63.1985 Who enforces this subpart?

- (a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or tribal agency. If the EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency as well as the U.S. EPA has the authority to implement and enforce this subpart. Contact the applicable EPA Regional Office to find out if this subpart is delegated to a State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.
- (c) The authorities that will not be delegated to State, local, or tribal agencies are as follows. Approval of alternatives to the standards in §63.1955. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

§ 63.1990 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, 40 CFR part 60, subparts A, Cc, and WWW; 40 CFR part 62, subpart GGG, and subpart A of this part, and this section that follows:

Bioreactor means a MSW landfill or portion of a MSW landfill where any liquid other than leachate (leachate includes landfill gas condensate) is added in a controlled fashion into the waste mass (often in combination with recirculating leachate) to reach a minimum average moisture content of at least 40 percent by weight to accelerate or enhance the anaerobic (without oxygen) biodegradation of the waste.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emissions limitation (including any operating limit) or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation, (including any operating limit), or work practice standard in this subpart during SSM, regardless of whether or not such failure is permitted by this subpart.

Emissions limitation means any emission limit, opacity limit, operating limit, or visible emissions limit.

EPA approved State plan means a State plan that EPA has approved based on the requirements in 40 CFR Part 60, subpart B to implement and enforce 40 CFR Part 60, subpart Cc. An approved State plan becomes effective on the date specified in the notice published in the Federal Register announcing EPA's approval.

Federal plan means the EPA plan to implement 40 CFR Part 60, subpart Cc for existing MSW landfills located in States and Indian country where State plans or tribal plans are not currently in effect. On the effective date of an EPA approved State or tribal plan, the Federal plan no longer applies. The Federal plan is found at 40 CFR Part 62, subpart GGG.

Municipal solid waste landfill or MSW landfill means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. A municipal solid waste landfill may also receive other types of RCRA Subtitle D wastes (see §257.2 of this chapter) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of a municipal solid waste landfill may be separated by access roads. A municipal solid waste landfill may be publicly or privately owned. A municipal solid waste landfill may be a new municipal solid waste landfill, an existing municipal solid waste landfill, or a lateral expansion.

Tribal plan means a plan submitted by a tribal authority pursuant to 40 CFR parts 9, 35, 49, 50, and 81 to implement and enforce 40 CFR Part 60, Subpart Cc.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

As stated in §§63.1955 and 63.1980, you must meet each requirement in the following table that applies to you.

Table 1 to Subpart AAAAA of Part 63—Applicability of NESHAP General Provisions to Subpart AAAAA

Part 63 Citation	Description	Explanation
63.1(a)	Applicability: general applicability of NESHAP in this part	Affected sources are already subject to the provisions of paragraphs (a)(10)-(12) through the same provisions under 40 CFR, part 60 subpart A.
63.1(b)	Applicability determination for stationary sources	
63.1(e)	Title V permitting	
63.2	Definitions	
63.4	Prohibited activities and circumvention	Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR, part 60 subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	
63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions	
63.6(f)	Compliance with nonopacity emission standards	Affected sources are already subject to the provisions of paragraphs (f)(1) and (2)(i) through the same provisions under 40 CFR, part 60 subpart A.
63.10(b)(2)(i)-(b)(2)(v)	General recordkeeping requirements	

Part 63 Citation	Description	Explanation
63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified	
63.15	Availability of information and confidentiality	

Attachment 7 - Guidance On Relevant Regulations and other Information
Referenced In The Permit

- Links to relevant regulations are available from Illinois EPA's Internet site:
<http://www.epa.state.il.us/regulations.html>
- Illinois Regulations are shown on the Illinois Pollution Control Boards Internet Site:
<http://www.ipcb.state.il.us/SLR/IPCBandIEPAEnvironmentalRegulations-Title35.asp>
- Links to USEPA Regulations are shown on the USEPA Internet Site:
<http://www.epa.gov/epahome/rules.html>

Other Information and Guidance:

- Rule and Implementation Information for Standards of Performance for Municipal Solid Waste Landfills (40 CFR 60 Subpart WWW):
<http://www.epa.gov/ttn/atw/landfill/landflpg.html>
- NESHAP Rule and Implementation Information for Municipal Solid Waste Landfills (40 CFR 63 Subpart AAAA):
<http://www.epa.gov/ttn/atw/landfill/lndfillpg.html>

- USEPA Region 4 Guidance on the Asbestos NESHAP
<http://www.epa.gov/region4/air/asbestos/>
- AP-42 - Section 2.4 - Municipal Solid Waste Landfills
<http://www.epa.gov/ttn/chief/ap42/ch02/final/c02s04.pdf>
- Landfill Gas Emissions Model (LandGEM), version 3.02. XLS file is the LandGEM Model (MS Excel Spreadsheet); 2kb file is ReadMe First file; and 1365kb PDF file is the User's Guide (EPA-600/R-05/047)
<http://www.epa.gov/ttn/catc/products.html#software>