DRAFT CAAPP PERMIT
August 8, 2008

217/782-2113

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

PERMITTEE:

Waste Management of Illinois, Inc.
Attn: Anson Johnson, Project Manager-Closed Sites
7 North 500 Route 25
South Elgin, Illinois 60177

I.D. No.: 089813AAJ
Application No.: 95090109

Date Received: January 10, 2006
Date Issued:
Expiration Date[1]:

Operation of: Woodland Recycling and Disposal Facility, Closed Landfill
Source Location: 7 North 500 Route 25, South Elgin, Kane County, 60120
Responsible Official: Anson Johnson, Project Manager-Closed Sites

This permit is hereby granted to the above-designated Permittee to OPERATE a Closed MSW 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 Jack Yates at 217/782-2113.

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

ECB:JMY:jws

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

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

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1.0 INTRODUCTION

1.1 Source Identification

Woodland Recycling and Disposal Facility
7 North 500 Route 25
South Elgin, Illinois 60177
262/253-8626 extension 115

I.D. No.: 089813AAJ
County: Kane
Standard Industrial Classification: 4953, Refuse Systems

1.2 Owner/Parent Company

Waste Management of Illinois, Inc.
7 North 500 Route 25
South Elgin, Illinois 60177

1.3 Operator

Waste Management of Illinois, Inc.
7 North 500 Route 25
South Elgin, Illinois 60177

Anson Johnson, Project Manager-Closed Sites
630/218-1914

1.4 Source Description

The source is a Closed Municipal Solid Waste Landfill that supplies landfill gas to a Landfill Gas Treatment System with two on site electricity generating engines. In addition, one enclosed flare and one open utility flare are also used to control landfill gas generated by 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 revise Title I requirements established in permits previously issued for this source, which conditions are specifically designated as “T1R.”

c. 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.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
BACT	Best Available Control Technology
BAT	Best Available Technology
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
HAP	Hazardous Air Pollutant
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
LAER	Lowest Achievable Emission Rate
MACT	Maximum Achievable Control Technology
MSSCAM	Major Stationary Sources Construction and Modification (35 IAC 203, New Source Review for non-attainment areas)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
$PM_{2.5}$	Particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 microns as measured by applicable test or monitoring methods
PSD	Prevention of Significant Deterioration (40 CFR 52.21, New Source Review for attainment areas)
RMP	Risk Management Plan
SO_2	Sulfur Dioxide
T1	Title I – identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New – identifies Title I conditions that are being established in this permit
T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOM	Volatile Organic Material

3.0 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:

2,000 Gallon Condensate Tank
6,000 Gallon Condensate Tank

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

Vent for Engine/Generator Crankcase

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)]

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

3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC

212.301 and 212.123 (Condition 5.3.2), the Permittee shall comply with the following requirements, as applicable:

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

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

3.2.3 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 218.122, 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
Closed MSW Landfill	Municipal Solid Waste Landfill with Active Gas Collection and Control System	Commenced Construction: 1976 Last Modification: May 1989	Landfill Gas Treatment System with Engines and/or Enclosed Flare and/or Utility Flare
Engines	Landfill Gas Fired Reciprocating Engine 1	December 1991	None
	Landfill Gas Fired Reciprocating Engine 2	December 1991	None

5.0 OVERALL SOURCE CONDITIONS

5.1 Applicability of Clean Air Act Permit Program (CAAPP)

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of CO emissions.

5.1.2 This permit is issued based on the source requiring a CAAPP permit because the source is in a source category designated by the USEPA, pursuant to 40 CFR 70.3(a)(5). [Section 39.5(2)(a)(iv) of the Act]

5.2 Area Designation

This permit is issued based on the source being located in an area that, as of the date of permit issuance, is designated Nonattainment for $PM_{2.5}$, Moderate Nonattainment for ozone and attainment or unclassifiable for the National Ambient Air Quality Standards for all other criteria pollutants (CO, lead, NO_2, PM_{10}, SO_2).

5.3 Source-Wide Applicable Provisions and Regulations

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

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

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

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

5.3.3 Ozone Depleting Substances

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

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

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

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

5.3.4 Risk Management Plan (RMP)

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

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

b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the RMP, as part of the annual compliance certification required by Condition 9.8.

5.3.5 Future Emission Standards

a. Should this stationary source become subject to a new or revised regulation under 40 CFR Parts 60, 61, 62, or 63, or 35 IAC Subtitle B after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by Condition 9.8. This permit may also have to be revised or reopened to address such new or revised regulations (see Condition 9.12.2).

b. This permit and the terms and conditions herein do not affect the Permittee’s past and/or continuing obligation with respect to statutory or regulatory requirements governing major source construction or modification under Title I of the CAA. Further, neither the issuance of this permit nor any of the terms or conditions of the permit shall alter or affect the liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.

5.4 Source-Wide Non-Applicability of Regulations of Concern

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

5.5 Source-Wide Control Requirements and Work Practices

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

5.6 Source-Wide Production and Emission Limitations

5.6.1 Permitted Emissions for Fees

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	10.55
Sulfur Dioxide (SO_2)	21.89
Particulate Matter (PM)	2.2
Nitrogen Oxides (NO_x)	89.64
HAP, not included in VOM or PM	0.6
Total	124.88

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 0.4 tons/year for each individual HAP and 1.0 tons/year for all HAPs combined. Compliance with annual limits shall be determined on a calendar year basis by adding emissions from all emission units. This condition is being imposed so that the source is not a major source of HAP emissions. The Permittee shall fulfill the applicable testing, recordkeeping, and reporting requirements of Conditions 5.7.2, 5.9.2, and 5.10.2.

5.6.3 Other Source-Wide Production and Emission Limitations

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

5.7 Source-Wide Testing Requirements

5.7.1 Pursuant to 35 IAC 201.282 and Section 4(b) of the Act, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of

determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

a. Testing by Owner or Operator: The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests. [35 IAC 201.282(a)]

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

c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.7.2 HAP Testing to Verify Minor Source Status

a. If for the previous calendar year, emissions of HAPs exceeded either 0.4 tons/year of a single HAP or 1.0 tons/year of total HAPs, then the owner or operator shall submit a annual estimate of the HAP emission rate report based on records as provided in Condition 5.9.2

i. If the resulting HAP emission rate is greater than 80% of major source threshold for individual and total HAPs (greater than 8 tons of a single HAP and greater than 20 tons of total HAPs), testing for HAPs using the sampling and analytical procedures specified in 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills (i.e., 40 CFR 60.754) shall be conducted as follows: Testing shall be conducted annually after the estimated HAP emissions exceed the 80% threshold.

ii. HAP emissions shall be estimated using the waste acceptance data required in Condition 7.1.7, and the AP-42 landfill emissions estimating model in Condition 7.1.12, and the NMOC/HAP concentration data determined above.

iii. The minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42).

iv. After the installation of a collection and control system, the owner or operator shall calculate the NMOC/HAP emission rate, for purposes of determining compliance with Condition 5.6.2, using the procedures 40 CFR 60.754(b).

b. The calculation as to whether the 0.4 tons/year of a single HAP or 1.0 tons/year of total HAPs, threshold was exceeded shall be based on records and procedures in Condition 7.1.7 and 7.1.12 and shall be completed by January 31 for the previous calendar year. If testing is required it shall be completed by March 15.

c. Any such tests are also subject to the Testing Procedures of Condition 8.5 set forth in the General Permit Conditions of Section 8.

5.8 Source-Wide Monitoring Requirements

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

5.9 Source-Wide Recordkeeping Requirements

5.9.1 Annual Emission Records

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

5.9.2 Records for HAP Emissions

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

b. If testing is required by Condition 5.7.2, the Permittee shall keep records of the testing, including the test date, conditions, methodologies, calculations, and test results.

5.9.3 Retention and Availability of Records

a. All records and logs required by this permit shall be retained for at least five years from the date of entry

(unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.

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

5.10 Source-Wide Reporting Requirements

5.10.1 General Source-Wide Reporting Requirements

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

5.10.2 Annual Emissions Report

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

5.11 Source-Wide Operational Flexibility/Anticipated Operating Scenarios

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

5.12 Source-Wide Compliance Procedures

5.12.1 Procedures for Calculating Emissions

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

6.0 CONDITIONS FOR EMISSIONS CONTROL PROGRAMS

6.1 Emissions Reduction Market System (ERMS)

6.1.1 Description of ERMS

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

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

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

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

6.1.2 Applicability

This permit is issued based on this source not being a participating source in the Emissions Reduction Market System (ERMS), 35 IAC Part 205, pursuant to 35 IAC 205.200. This is

based on the source’s actual VOM emissions during the seasonal allotment period from May 1 through September 30 of each year being less than 10 tons and the source's baseline emissions also being less than 10 tons.

6.1.3 Recordkeeping and Reporting

a. The Permittee shall maintain the following records to allow the confirmation of actual VOM emissions during the seasonal allotment period:

   i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;

   ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Sections 5 and 7 of this permit; and

   iii. Total VOM emissions from the source, in tons, during each seasonal allotment period, which shall be compiled by November 30 of each year.

b. In the event that the source’s VOM emissions during the seasonal allotment period equal or exceed 10 tons, the source shall become a participating source in the ERMS and beginning with the following seasonal allotment period, shall comply with 35 IAC Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period, unless the source obtains exemption from the ERMS by operating with seasonal VOM emissions of no more than 15 tons pursuant to a limitation applied for and established in its CAAPP permit.

7.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

7.1 MSW Landfill

7.1.1 The municipal solid waste landfill is a closed landfill, with an active gas collection system that supplies landfill gas to a Landfill Gas Treatment System and/or two on-site electricity-generating engines and/or an enclosed flare and/or a utility 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	Date Constructed	Emission Control Equipment
MSW Landfill	Closed Municipal Solid Waste Landfill with Active Gas Collection System	Commenced Construction: 1976 Last Modification: May 1989	Landfill Gas Treatment System with Engines and/or Enclosed Flare and/or Utility Flare

7.1.3 Applicable Provisions and Regulations

The “affected MSW Landfill” for the purpose of these unit-specific conditions, is the Closed MSW Landfill described in Conditions 7.1.1 and 7.1.2.

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. The affected landfill is subject to 35 IAC Part 220, Non-methane Organic Compounds, because construction or modification of the affected landfill commenced before May 30, 1991 and has accepted waste since November 8, 1987, pursuant to 35 IAC 220.200(a).

35 IAC 220.210 - Compliance Requirements and Schedule:

i. An owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million Mg and 2.5 million m^3 shall submit an initial design capacity report and initial emissions rate report to the Illinois EPA, as provided in Condition 7.1.10(a) and (b), and comply with either Condition 7.1.3(c)(ii) or (iii). [35 IAC 220.210(b)]

ii. For MSW landfills with an NMOC emissions rate less than 50 Mg/yr, the owner or operator shall: [35 IAC 220.210(c)]

A. Submit an emission rate report, as provided by Condition 7.1.10(b), to the Illinois EPA; and [35 IAC 220.210(c)(1)]

B. Recalculate the NMOC emission rate using the procedures specified in Condition 7.1.7(a) until such time as the calculated NMOC emission rate is equal to or greater than 50 Mg/yr, at which time the provisions of Condition 7.1.3(c)(iii) shall apply, or the landfill is inactive. [35 IAC 220.210(c)(2)]

iii. For MSW landfills with emissions equal to or greater than 50 Mg/yr, calculated pursuant to Condition 7.1.7(a), within 30 months after the date when the first annual NMOC emission rate report equals or exceeds 50 Mg/yr, an owner or operator shall: [35 IAC 220.210(d)]

A. Install and operate: [35 IAC 220.210(d)(1)]

1. A gas collection and control system meeting the gas collection system and control requirements of 35 IAC 220.220 and 220.230 (Below); or [35 IAC 220.210(d)(1)(A)]

2. An alternate gas collection and control system using alternate procedures for gas collection and control, determining compliance, monitoring, operation, testing, recordkeeping, or reporting instead of those provided for in this Subpart, as approved by the Illinois EPA or Board, as meeting the requirements in Condition 7.1.3(g) or (h), or Condition 7.1.3(i)(iv) or (v). Such alternate system shall be effective only when included in a federally enforceable permit or approved as a SIP revision. [35 IAC 220.210(d)(1)(B)]

3. The Permittee tested over the 50 Mg/yr limit and submitted a design plan approved in Permit 99110005.

B. Certify compliance: Within 6 months of initial startup or upon change in method of compliance the owner or operator of an MSW landfill subject to the control requirements of Condition 7.1.3 must certify compliance with the requirements of Condition 7.1.3 by submitting to the Illinois EPA the following: [35 IAC 220.210(d)(2)]

1. A description of the gas collection and control system used; [35 IAC 220.210(d)(2)(A)]

2. The date the system was installed; and [35 IAC 220.210(d)(2)(B)]

3. A demonstration that the control system meets the requirements of Condition 7.1.3(i): [35 IAC 220.210(d)(2)(C)]

I. For active collection systems: the reduction efficiency or ppmv must be established by a performance test using the test methods required pursuant to Condition 7.1.7(d); or [35 IAC 220.210(d)(2)(C)(i)]

II. For open flares: compliance with the requirements of 40 CFR 60.18, incorporated by reference in 35 IAC 220.130, must be established. [35 IAC 220.210(d)(2)(C)(ii)]

d. Gas Collection System Requirements - 35 IAC 220.220:

Each owner or operator of an MSW landfill having a design capacity equal to or greater than 2.5 million Mg and 2.5 million m^3, and a calculated NMOC emission rate equal to or greater than 50 Mg/yr, must install and operate a gas collection system that meets the requirements of either 35 IAC 220.220(b), (c), (d), or (e) (Below) and: [35 IAC 220.220(a)]

i. Handles maximum expected gas flow rate from the entire area of the MSW landfill that warrants control pursuant to Condition 7.1.3(e)(i)(D) for the period required in Condition 7.1.5(h), as calculated pursuant to Condition 7.1.12(a); [35 IAC 220.220(a)(1)]

ii. Collects gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of: [35 IAC 220.220(a)(2)]

A. 5 years or more, if active; or [35 IAC 220.220(a)(2)(A)]

B. 2 years or more if closed or at final grade; [35 IAC 220.220(a)(2)(B)]

iii. Is designed to minimize off-site migration of subsurface gas; [35 IAC 220.220(a)(3)]

iv. Routes all the collected gas to a control system that complies with the requirements in Condition 7.1.3(j); and [35 IAC 220.220(a)(4)]

v. Collects and treats gas in accordance with the applicable requirements of 35 IAC Subtitle G. [35 IAC 220.220(a)(5)]

e. Active Collection Systems: [35 IAC 220.220(b)]

i. Active collection wells, horizontal collectors, surface collectors, or other extraction devices shall be sited at a sufficient density throughout all gas producing areas using the following procedures: [35 IAC 220.220(b)(1)]

A. The collection devices within the interior and along the perimeter areas shall be designed to achieve comprehensive control of surface gas emissions. [35 IAC 220.220(b)(1)(A)]

B. The sites for gas collection devices, as determined in 35 IAC 220.220(b)(i)(A) (Above), shall address landfill gas migration issues and augmentation of the collection system through the use of active or passive systems at the landfill perimeter or exterior. [35 IAC 220.220(b)(1)(B)]

C. Collect gas at a sufficient extraction rate, as defined at 35 IAC 220.110. [35 IAC 220.220(b)(1)(C)]

D. The placement of gas collection devices determined in 35 IAC 220.220(b)(i)(A) (above) shall control all gas producing areas, except as provided below. [35 IAC 220.220(b)(1)(D)]

1. Any segregated area of asbestos or nondegradable material may be excluded from collection, if documented as provided under Condition 7.1.10(f). The

documentation shall provide the nature, date of deposition, location and amount of asbestos or nondegradable material deposited in the area, and shall be provided to the Illinois EPA upon request. [35 IAC 220.220(b)(1)(D)(i)]

2. Any nonproductive area of the landfill may be excluded from control provided that the total of all excluded areas can be shown to contribute less than 1 percent of the total amount of NMOC emissions from the landfill. The amount, location, and age of the material shall be documented and provided to the Illinois EPA upon request. A separate NMOC emissions estimate shall be made for each section proposed for exclusion, and the sum of all such sections shall be compared to the NMOC emissions estimate for the entire landfill, as calculated pursuant to Condition 7.1.7. Emissions from each section shall be computed using the following equation: [35 IAC 220.220(b)(1)(D)(ii)]

$$Q_i = 2k\, L_o\, M_i (e^{kt_i})(C_{NMOC})(3.6 \times 10^{-9})$$

Where:

Q_i = NMOC emission rate from the ith section, Mg/yr

k = Methane generation rate constant, yr^{-1}

L_o = Methane generation potential, m^3 per Mg solid waste

M_i = Mass of degradable solid waste in the ith section, Mg

t_i = Age of the solid waste in the ith section, years

C_{NMOC} = Concentration of NMOC, ppmv

3.6×10^{-9} = Conversion factor

The values for k and C_{NMOC} determined in field testing shall be used, if field testing has been performed in determining the NMOC emission rate or the radii of influence (the distance from the well center to a point in the landfill where

the pressure gradient applied by the blower or compressor approaches zero). If field testing has not been performed, the default values for k, L_o, and C_{NMOC} provided in Condition 7.1.7(a) shall be used. The mass of nondegradable solid waste contained within the given section may be subtracted from the total mass of the section when estimating emissions, provided the nature, location, age and amount of the nondegradable material is documented. [35 IAC 220.220(b)(1)(D)(ii)]

ii. The gas collection devices shall be constructed using the following equipment or procedures: [35 IAC 220.220(b)(2)]

A. The landfill gas extraction components shall be constructed of polyvinyl chloride (PVC), high density polyethylene (HDPE) pipe, fiberglass, stainless steel, or other nonporous corrosion resistant material of suitable dimensions to convey projected amounts of gases; withstand installation, static, and settlement forces; and withstand planned overburden or traffic loads. The collection system shall extend as necessary to comply with emission and migration standards. Collection devices, such as wells and horizontal collectors, shall be perforated to allow gas entry without head loss sufficient to impair performance across the intended extent of control. Perforations shall be situated with regard to the need to prevent excessive air infiltration. [35 IAC 220.220(b)(2)(A)]

B. Vertical wells shall be placed so as not to endanger underlying liners and shall address the occurrence of water within the landfill. Holes and trenches constructed for piped wells and horizontal collectors shall be of sufficient cross-section so as to allow for their proper construction and completion including, for example, centering of pipes and placement of gravel backfill. Collection devices shall be designed so as not to allow indirect short circuiting of air into the cover, refuse into the collection system or gas into the air. Any gravel used around pipe perforations should be of a dimension so as not to penetrate or block perforations. [35 IAC 220.220(b)(2)(B)]

C. Collection devices may be connected to the collection header pipes below or above the landfill surface. The connector assembly shall include a positive closing throttle valve, any necessary seals and couplings, access couplings and at least one sampling port. The collection devices shall be constructed of PVC, HDPE, fiberglass, stainless steel, or other nonporous material of suitable thickness. [35 IAC 220.220(b)(2)(C)]

iii. The landfill gas shall be conveyed to a gas control system through the collection header pipe(s). The gas mover equipment shall be sized to handle the maximum gas generation flow rate expected for the period of intended use pursuant to the following procedures: [35 IAC 220.220(b)(3)]

A. For existing gas collection systems, the flow data shall be used to project the maximum flow rate. If no flow data exists, the procedures in 35 IAC 220.220(b)(3)(B) (Below) shall be used. [35 IAC 220.220(b)(3)(A)]

B. For new gas collection systems, the maximum flow rate shall be in accordance with Condition 7.1.12(a). [35 IAC 220.220(b)(3)(B)]

f. Passive Collection Systems: [35 IAC 220.220(c)]

i. A passive collection system shall be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall meet all requirements specified in 35 IAC 811.306. [35 IAC 220.220(c)(1)]

ii. The collection and control system shall either conform with the specifications for active collection systems in 35 IAC 220.220(a) or the owner or operator must obtain the Illinois EPA's approval for alternate provisions as provided for in 35 IAC 220.220(d) (Below). [35 IAC 220.220(c)(2)]

g. Alternate Collection Systems: [35 IAC 220.220(d)]

An owner or operator seeking to install an alternate gas collection system shall demonstrate to the Illinois EPA that such collection system is capable of capturing the maximum expected gas flow rate from the entire area of the MSW landfill, for the period required in Condition 7.1.5(h), as calculated pursuant to Condition 7.1.12(a), and in an equivalent manner to that required by 35 IAC 220. Any alternate gas collection system must be approved by the Illinois EPA. Such alternate shall be effective only when included in a federally enforceable permit or approved as a

SIP revision. The alternate shall include any alternate procedures for collection, control, compliance, monitoring, operation, testing, reporting, and recordkeeping that are appropriate. [35 IAC 220.220(d)]

h. Alternate Emissions Standard: [35 IAC 220.220(e)]

Pursuant to Section 28.1 of the Act [415 ILCS 5/28.1], and in accordance with 35 IAC 106, Subpart G, provisions for adjusted standards, adjusted standards for alternate emissions standards or alternate emissions standards with an alternate compliance schedule shall be granted by the Board, to the extent consistent with federal law. An owner or operator seeking an alternate emissions standard or an alternate emissions standard with an alternate compliance schedule must demonstrate to the Board that, with respect to the MSW landfill, the control requirements meet one or more of the criteria listed in this subsection (e) pursuant to 40 CFR 60.24(f). Any such request must be approved by the Board. Such alternate shall be effective only when included in a federally enforceable permit or approved as a SIP revision. Any alternate shall include any procedures for collection, control, compliance, monitoring, operation, testing, reporting and recordkeeping that are appropriate and a demonstration that the control requirements, as contained in this Subpart, as they apply to the MSW landfill, meet one or more of the following criteria:

i. Unreasonable cost of control resulting from plant age, location, or basic process design; [35 IAC 220.220(e)(1)]

ii. Physical impossibility of installing necessary control equipment; or [35 IAC 220.220(e)(2)]

iii. Other factors specific to the MSW landfill that support an alternate emissions standard or alternate emissions standard with final compliance date. [35 IAC 220.220(e)(3)]

i. Gas Control System Requirements: [35 IAC 220.230]

Each owner and operator of an MSW landfill subject to the control requirements of Condition 7.1.3 must install and operate a gas collection system that routes all the collected gas to a gas control system that complies with the requirements in 35 IAC 220.230(f) and either install a gas control system, as described in either 35 IAC 220.230(a), (b), or (c), or obtain approval of and install an alternate gas control system pursuant to 35 IAC 220.230(d) or (e) (Below).

i. An open flare designed and operated in accordance with 40 CFR 60.18, incorporated by reference in 35 IAC 220.130. [35 IAC 220.230(a)]

ii. 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 ppmv, dry basis as hexane at 3 percent oxygen. The reduction efficiency or ppmv must be established by an initial performance test using the test methods required under Condition 7.1.7(d): [35 IAC 220.230(b)]

A. If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone. [35 IAC 220.230(b)(1)]

B. 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 Condition 7.1.8. The initial performance test must be performed within 6 months after startup or by October 31, 2001, whichever is later. [35 IAC 220.230(b)(2)]

iii. 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 35 IAC 220.230(b) (Above). [35 IAC 220.230(c)]

iv. An alternate gas control system approved by the Illinois EPA. An owner or operator seeking to install an alternate gas control system shall demonstrate to the Illinois EPA that such collection system is capable of control equivalent to 35 IAC 220.230(b) (Above). Such alternate shall be effective only when included in a federally enforceable permit or approved as a SIP revision. The alternate shall include any alternate procedures for collection, control, compliance, monitoring, operation, testing, reporting, and recordkeeping that are appropriate. [35 IAC 220.230(d)]

v. Pursuant to Section 28.1 of the Act [415 ILCS 5/28.1], and in accordance with 35 IAC 106, Subpart G, provisions for adjusted standards, adjusted standards for alternate emissions standards or alternate emissions standards with an alternate compliance schedule shall be granted by the Board, to the extent consistent with federal law. An owner or operator seeking an alternate emissions standard or an alternate emissions standard with an alternate compliance schedule must demonstrate to the Board that, with respect to the MSW landfill, the control

requirements meet one or more of the criteria listed in this subsection (e), pursuant to 40 CFR 60.24(f). Any such request must be approved by the Board. Such alternate shall be effective only when included in a federally enforceable permit or approved as a SIP revision. Any alternate shall include any procedures for collection, control, compliance, monitoring, operation, testing, reporting, and recordkeeping that are appropriate and a demonstration that the control requirements as contained in this Subpart, as they apply to the MSW landfill, meet one or more of the following criteria: [35 IAC 220.230(e)]

A. Unreasonable cost of control resulting from plant age, location, or basic process design; [35 IAC 220.230(e)(1)]

B. Physical impossibility of installing necessary control equipment; or [35 IAC 220.230(e)(2)]

C. Other factors specific to the MSW landfill that support an alternate emissions standard or alternate emissions standard with final compliance date. [35 IAC 220.230(e)(3)]

vi. Gas control systems must be operated in accordance with a permit issued pursuant to the applicable requirements of 35 IAC Subtitle G. [35 IAC 220.230(f)]

j. The affected landfill's utility flare is subject to 40 CFR 60.18 - General control device requirements [40 CFR 60.18(a)]
and
40 CFR 60.754 Test Methods and Proceedures. [40 CFR 60.754(a)]

The open flare(s) shall be designed and operated in accordance with 40 CFR 60.18, except as noted in 40 CFR 60.754(e). This includes the following:

i. The open flare(s) shall be designed for and operated with no visible emissions as determined by the methods specified in 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c)(1)]

ii. The open flare(s) shall be operated with a flame present at all times while landfill gasses are being vented to it, as determined by the methods specified in 40 CFR 60.18(f). [40 CFR 60.18(c)(2)]

iii. The open flare(s) shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater. The net heating

value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.754(e).

iv. The open flare(s) shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in 40 CFR 60.18(f)(6). [40 CFR 60.18(c)(5)]

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

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

vii. Reference Method 22 shall be used to determine the compliance of open flare(s) with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22. [40 CFR 60.18(f)(1)]

viii. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18(f)(2)]

ix. The net heating value of the gas being combusted in the open flare(s) shall be calculated from the concentration of methane in the landfill gas as measured by method 3C pursuant to 40 CFR 60.754(e).

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

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

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

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

8.706 = Constant

0.7084 = Constant

H_T = The net heating value as determined in accordance with 40 CFR 60.754(e).

k. The affected landfill is subject to 40 CFR 63, Subparts A and AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills. In this case, applicability is based upon the MSW landfill at the source meeting the criteria in 40 CFR 63.1935(a)(3). Additionally, the source is defined as an existing affected source based upon the criteria shown 40 CFR 63.1940.

Therefore, on or before January 16, 2004, the Permittee shall comply with the requirements in 40 CFR 63.1955(b) and 63.1960 through 63.1980. [40 CFR 63.1945(b) and 63.1945(f)]

The Permittee is required to comply with the requirements of the NESHAP 40 CFR 63 Subpart AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, and/or any amendments promulgated by USEPA. These requirements include but are not limited to the following:

i. Compliance with the requirements of 40 CFR Part 60, Subpart WWW. [40 CFR 63.1955(a)(1)]

ii. 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)]

iii. 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 40 CFR 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)]

iv. 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)]

v. 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:

A. 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)]

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. [40 CFR 63.1965(b)]

C. A deviation occurs when a SSM plan is not developed, implemented, or maintained on site. [40 CFR 63.1965(c)]

vi. 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)]

vii. 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)]

l. 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]

For any waste disposal site that receives or has received asbestos-containing waste material, the Permittee must comply with the requirements of 40 CFR 61.154. Pursuant to 40 CFR 61.154(g), upon closure of an affected landfill, the Permittee shall comply with all provisions of 40 CFR 61.151 as follows:

i. Comply with one of the following:

A. Either discharge no visible emissions to the outside air from an inactive waste disposal site subject to this paragraph; or

B. Cover the asbestos-containing waste material with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material, and grow and maintain a cover of vegetation on the area adequate to prevent exposure of the asbestos-containing waste material. In desert areas where vegetation would be difficult to maintain, at least 8 additional centimeters (3 inches) of well-graded, nonasbestos crushed rock may be placed on top of the final cover instead of vegetation and maintained to prevent emissions; or

C. 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; or

D. For inactive waste disposal sites for asbestos tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used instead of the methods in paragraphs (a)(1), (2), and (3) of this section. Use the agent in the manner and frequency recommended for the particular asbestos tailings by the manufacturer of the dust suppression agent to achieve and maintain dust control. Obtain prior written approval of the Administrator to use other equally effective dust suppression agents. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.

ii. Unless a natural barrier adequately deters access by the general public, install and maintain warning signs and fencing as follows, or comply with paragraph (a)(ii) or (a)(iii) of this section.

A. Display warning signs at all entrances and at intervals of 100 m (328 ft) or less along the property line of the site or along the perimeter of the sections of the site where asbestos-containing waste material was deposited. The warning signs must:

I. Be posted in such a manner and location that a person can easily read the legend; and

II. Conform to the requirements for 51 cm x 36 cm (20" x 14") upright format signs specified in 29 CFR 1910.145(d)(4) and this paragraph; and

III. Display the following legend in the lower panel with letter sizes and styles of a visibility at least equal to those specified in this paragraph.

Legend	Notation
Asbestos Waste Disposal Station	2.5 cm(1 inch)Sans Serif, Gothic or Block
Do Not Create Dust	1.9 cm(3/4 inch)Sans Serif, Gothic or Block
Breathing Asbestos is Hazardous to Your Health	14 Point Gothic

Spacing between any two lines must be at least equal to the height of the upper of the two lines.

iii. Fence the perimeter of the site in a manner adequate to deter access by the general public.

iv. When requesting a determination on whether a natural barrier adequately deters public access, supply information enabling the Administrator to determine whether a fence or a natural barrier adequately deters access by the general public.

v. The owner or operator may use an alternative control method that has received prior approval of the Administrator rather than comply with the requirements of paragraph (a) or (b) of this section.

vi. Notify the Administrator 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 under this section, and follow the procedures specified in the notification. 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 Administrator 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:

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 Administrator may require changes in the emission control procedures to be used.

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

vii. Within 60 days of a site becoming inactive and after the effective date of this subpart, record, in accordance with State law, a notation on the deed to the facility property and on any other instrument that would normally be examined during a title search; this notation will in perpetuity notify any potential purchaser of the property that:

A. The land has been used for the disposal of asbestos-containing waste material;

B. The survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site required in 40 CFR 61.154(f) have been filed with the Administrator; and

C. The site is subject to 40 CFR 61, subpart M.

m. This Permit is issued based upon the following alternatives for the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 35 IAC Part 220 in the Landfill Gas Collection and Control System Design Plan, Permit 99110005, being approved by the Illinois EPA under either 35 IAC 220.230(d) or 35 IAC 220.230(e). These alternatives are addressed in subsequent Special Conditions.

i. The exclusion of dangerous areas from the surface monitoring plan such as roadways, the active areas of the landfill, truck traffic, and steep sloped areas with a grade equal to 4:1.

ii. The use of USEPA Method 3C as opposed to USEPA Method 3A.

iii. Submittal of the annual report required by the 35 IAC 220.280(c) shall be submitted within 180 days after the gas collection and control system is determined to be in compliance.

iv. The engines are excluded from the requirement to install a temperature monitoring device equipped with a continuous recorder.

v. To monitor landfill gas flow on a continuous basis, to record an hourly flow average within the flow meter software, and to report flow to the engines on a monthly basis using a monthly average of the hourly

data. For the enclosed flare(s), the Permittee shall monitor the flow at the orifice plate on a weekly basis when in use.

vi. The exclusion from the requirement to keep and maintain records of engine combustion temperatures.

vii. The exclusion from the requirement to keep and maintain records of exceedances of the engines based upon all 3-hour periods of operation during which the average combustion temperature was more than 28 ºC below the average combustion temperature during the most recent performance test.

7.1.4 Non-Applicability of Regulations of Concern

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

b. 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.

7.1.5 Control Requirements and Work Practices

The Permittee is subject to the requirements of 35 IAC 220.250, Operational Standards for Collection and Control Systems:

Each owner or operator of an MSW landfill with a gas collection and control system shall: [35 IAC 220.250]

a. Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which the initial solid waste has been in place for: [35 IAC 220.250(a)]

i. 5 years or more if active; or [35 IAC 220.250(a)(1)]

ii. 2 years or more if closed or at final grade. [35 IAC 220.250(a)(2)]

b. Operate the collection system with negative pressure at each wellhead except under the following conditions: [35 IAC 220.250(b)]

i. A fire or increased well temperature. The owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as

provided in Condition 7.1.10(e)(i). [35 IAC 220.250(b)(1)]

ii. Use of a geomembrane or synthetic cover. The owner or operator shall develop pressure limits associated with such a cover that must be approved by the Illinois EPA. [35 IAC 220.250(b)(2)]

iii. 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. [35 IAC 220.250(b)(3)]

c. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55°C (131°F) and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent (except as noted below). The owner or operator may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration that provides supporting data to show that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methagens must be approved by the Illinois EPA before such higher operating value may be used.

The Illinois EPA has approved the Permittee's request to permanently establish a higher oxygen value of 15% for wells WDLCS001, WDLCS002, WODCO003, WODCO004, WODCO005, WODCO007, WODCO008, WODCO009, WODCO010, WODCO013, WODCO014, WMH001, WMH002, WMH003, WMH004, and WMH005. Oxygen at the above-referenced wells shall not exceed 15%, and monthly monitoring of CO shall continue. CO monitoring results shall be reported to the Illinois EPA with other monthly monitoring reports, per the schedule outlined in Condition 8.6.1.

Operating values shall be determined as follows: [35 IAC 220.250(c)]

i. The nitrogen level shall be determined using Method 3C, Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130. [35 IAC 220.250(c)(1)] or may be determined by the use of USEPA Method 3C as opposed to USEPA Method 3A.

ii. The oxygen level shall be determined by an oxygen meter using Method 3A, Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130, except that: [35 IAC 220.250(c)(2)]

A. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span; [35 IAC 220.250(c)(2)(A)]

B. A data recorder is not required; [35 IAC 220.250(c)(2)(B)]

C. Only two calibration gases are required, a zero and span, and ambient air may be used as the span; [35 IAC 220.250(c)(2)(C)]

D. A calibration error check is not required; and [35 IAC 220.250(c)(2)(D)]

E. The allowable sample bias, zero drift, and calibration drift are plus or minus 10 percent. [35 IAC 220.250(c)(2)(E)]

d. Operate the collection system so that the methane concentration is less than 500 ppm above background at the surface of the landfill. To determine if this level is exceeded, the owner or operator 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. An initial surface monitoring design plan shall be developed and included as part of the operating permit application (e.g., a CAAPP permit application) 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. The monitoring plan shall be updated as necessary. Updated copies must be sent to the Illinois EPA and kept on-site at the MSW landfill. [35 IAC 220.250(d)]

e. Operate the gas collection and control system such that all collected gases are vented to a control system designed and operated in compliance with Condition 7.1.3, 7.1.5 and 7.1.8. 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. [35 IAC 220.250(e)]

f. Operate the gas collection and control or treatment system at all times, except during shutdown or malfunction, provided that the duration of start-up, shutdown, or malfunction must not exceed 5 days for collection systems and must not exceed 1 hour for treatment or control devices. [35 IAC 220.250(f)]

g. If monitoring demonstrates that the operational requirements in Condition 7.1.5(b), (c), or (d) are not met, take corrective action as specified in Condition 7.1.12(a)(iii), (a)(v), or (c)(iv). If such corrective

actions are taken as specified in Section Condition 7.1.12(a)(iii), (a)(v), or (c)(iv), the monitored exceedence is not a violation of the operational requirements in Condition 7.1.5. [35 IAC 220.250(g)]

h. The collection and control system may be capped or removed provided: [35 IAC 220.250(h)]

i. The landfill is no longer accepting solid waste; [35 IAC 220.250(h)(1)]

ii. A system removal report has been submitted to the Illinois EPA, as provided in Condition 7.1.10(d); [35 IAC 220.250(h)(2)]

iii. The collection and control system has been operating a minimum of 15 years; [35 IAC 220.250(h)(3)]

iv. The calculated NMOC gas produced by the landfill is less than 50 Mg/yr on three successive test dates, pursuant to the procedures specified in Condition 7.1.7(b). The test dates shall be no less than 90 days apart, and no more than 180 days apart; and [35 IAC 220.250(h)(4)]

v. The system is not required to satisfy any applicable requirement of 35 IAC Subtitle G. [35 IAC 220.250(h)(5)]

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 landfill is subject to the following:

a. Emissions from the affected landfill's enclosed flare shall not exceed the following limits:

Pollutant	Lb/Hr	Ton/Yr
VOM	0.63	2.77
SO_2	0.59	2.60
PM	0.17	0.75
NO_x	7.70	34.00
CO	21.00	92.23

The above limitations were established in Permit 8811035, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [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). [T1]

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

Pollutant	Lb/Hr	Ton/Yr
VOM	0.27	1.19
SO_2	0.75	3.29
PM	0.13	0.57
NO_x	2.55	11.20
CO	11.55	50.73

The above limitations were established in Permit 00100013, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203. [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). [T1]

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

Pollutant	Ton/Yr
VOM	1.59

The above limitations were established in Permit 95090109, pursuant to 35 IAC Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically 35 IAC Part 203 The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the VOM emissions from the affected landfill below the levels that would trigger the applicability of these rules, consistent with the information provided in the CAAPP application. [T1R]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

7.1.7 Testing Requirements

The Permittee is subject to the requirements of 35 IAC 220.260 - Testing Methods and Procedures:

a. The landfill owner or operator shall calculate the NMOC emission rate using the equation provided in either Condition 7.1.7(a) or (b) (Below) and make a determination that the emission rate is less than 50 Mg/yr, or install a gas collection and control system pursuant to Condition 7.1.3(e) through (f). However, both equations may be used if the actual year-to-year solid waste acceptance rate is known for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, for part of the life of the landfill. If the NMOC emission rate calculated in this subsection is less than 50 Mg/yr, then the landfill owner shall submit an emission rate report as provided in Condition 7.1.7(b), and shall recalculate the NMOC mass emission rate as required under Condition 7.1.3(c)(iii). [35 IAC 220.260(a)]

The values to be used in both equations are 0.05/yr for k, 170 m^3 per Mg for L_o, and 4,000 ppmv as hexane for the C_{NMOC}. [35 IAC 220.260(a)(1)]

The following equation shall be used if the actual year-to-year solid waste acceptance rate is known: [35 IAC 220.260(a)(1)(A)]

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

Where:

M_{NMOC} = Total NMOC emission rate from the landfill, Mg/yr

k = Methane generation rate constant, yr^{-1}

L_o = Methane generation potential, m^3 per Mg solid waste

M_i = Mass of solid waste in the ith section, Mg

t_i = Age of the solid waste in the ith section, years

C_{NMOC} = Concentration of NMOC, ppmv as hexane

3.6×10^{-9} = Conversion factor

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for M_i if documentation of the nature and amount of such wastes is maintained. [35 IAC 220.260(a)(1)(A)]

The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown: [35 IAC 220.260(a)(1)(B)]

$$M_{NMOC} = 2L_o R(e^{-kc} - e^{-kt})(C_{NMOC})(3.6 \times 10^{-9})$$

Where:

M_{NMOC} = Total NMOC emission rate from the landfill, Mg/yr

L_o = Methane generation potential, m^3 per Mg solid waste

R = Average annual acceptance rate, Mg/yr

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

t = Age of landfill, years

C_{NMOC} = Concentration of NMOC, ppmv 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 average annual acceptance rate when calculating a value for R, if documentation of the nature and amount of such wastes is maintained. [35 IAC 220.260(a)(1)(B)]

Tier 1. The landfill owner or operator shall calculate the NMOC mass emission rate using the equations provided in Condition 7.1.7(a)or(b)(Above). The owner or operator shall compare the calculated NMOC mass emission rate to the standard of 50 Mg/yr using the default values for the NMOC mass emission rate and the methane generation rate constant. [35 IAC 220.260(a)(2)]

Tier 2. The landfill owner or operator shall calculate the NMOC mass emission rate using the equations provided in Condition 7.1.7(a)or(B) (Above) using the average NMOC concentration from the collected samples instead of the default value in the equations provided in Condition 7.1.7(a). The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure: The landfill owner or operator shall install at least 2 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 owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C or Method 18 of Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130. If using Method 18, the minimum list of compounds to be tested shall be those published in the Compilation of Air Pollutant Emission Factors (AP-42), incorporated by reference in 35 IAC 220.130. 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. Divide the NMOC concentration from Method 25C by 6 to convert from C_{NMOC} as carbon to C_{NMOC} as hexane. The owner or operator shall retest the site-specific NMOC concentration every 5 years using the methods specified in this Section. [35 IAC 220.260(a)(3)]

Tier 3. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in Condition 7.1.7(a)or(B) (Above) and using a site-specific methane generation rate constant k, and the site-specific NMOC concentration as determined in *Tier 2* instead of the default values provided in Condition 7.1.7(a). The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E, Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130. The calculation of the methane generation rate constant is performed only once, and the value obtained is used in all subsequent annual NMOC emission rate calculations. In addition, pursuant to *Tier 2*, the owner or operator shall retest the site-specific NMOC concentration every 5 years using the methods specified in that subsection. [35 IAC 220.260(a)(4)]

b. After the installation of a collection and control system in compliance with Condition 7.1.3, the owner or operator shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in Condition 7.1.5(h), using the following equation: [35 IAC 220.260(b)]

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

Where:

M_{NMOC} = Mass emission rate of NMOC (Mg/yr)

Q_{LFG} = Flow rate of landfill gas (m^3/minute)

C_{NMOC} = nmoc concentration (ppmv 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, Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130. [35 IAC 220.260(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, Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130.

If using Method 18, the minimum list of compounds to be tested shall be those published in the Compilation of Air Pollutant Emission Factors (AP-42), incorporated by reference in 35 IAC 220.130. The sample location on the common header pipe shall be before any condensate removal or other gas refining units. The landfill owner or operator shall divide the NMOC concentration from Method 25C by 6 to convert C_{NMOC} as carbon to C_{NMOC} as hexane. [35 IAC 220.260(b)(2)]

c. If the gas collection system complies with the provisions in Condition 7.1.3(e) through (i) and is already installed, the owner or operator shall estimate the NMOC emission rate using the procedures provided in Condition 7.1.7(b) (Above). For areas of the landfill where the owner or operator has not been required to install a well yet, he/she may select an appropriate method from Condition 7.1.7(a) (Above) to estimate emissions. [35 IAC 220.260(c)]

d. For the performance test required in Condition 7.1.3(i)(ii), Method 25C or Method 18, Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130, 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 Illinois EPA as provided by 35 IAC 220.230(d).

e. The owner or operator may use other methods to determine the NMOC concentration, site-specific k, or landfill gas flow rate, as an alternate to the methods required in *Tier 2* and *Tier 3*, if the method has been approved by the Illinois EPA. [35 IAC 220.260(e)]

f. The owner or operator may use the procedures described in AP-42, Compilation of Air Pollutant Emission Factors, incorporated by reference in 35 IAC 220.130, to estimate emissions pursuant to the annual emission report required in 35 IAC 210.302(a). The most recent values for k, L_o, and NMOC concentration reported in AP-42 shall be used to calculate emissions. To determine applicability of or compliance with the requirements of 35 IAC 220, the owner or operator must use the tiered emission estimates provided in Condition 7.1.7(a). [35 IAC 220.260(f)]

g. Upon a request by the Illinois EPA, the owner or operator of an MSW landfill shall at his own expense demonstrate compliance with the applicable requirements of 35 IAC 220 using the appropriate test method. [35 IAC 220.260(g)(1)]

An owner or operator planning to conduct a test to demonstrate compliance with 35 IAC 220 shall notify the Illinois EPA of that intent not less than 30 days before

the planned initiation of the tests so that the Illinois EPA may observe the test. [35 IAC 220.260(g)(2)]

7.1.8 Monitoring Requirements

The Permittee is subject to the requirements of 35 IAC 220.270 - Monitoring of Operations:

a. Active gas collection systems. Each owner or operator of 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: [35 IAC 220.270(a)]

   i. Measure the gauge pressure in the gas collection header on a monthly basis, as provided in Condition 7.1.12(a)(iii); and [35 IAC 220.270(a)(1)]

   ii. Monitor the temperature and nitrogen or oxygen concentration in the landfill gas on a monthly basis, as provided in Condition 7.1.12(a)(v). [35 IAC 220.270(a)(2)]

b. Enclosed combustors. Each owner or operator of an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment: [35 IAC 220.270(b)]

   i. A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of plus or minus 1 percent of the temperature being measured, expressed in degrees Celsius, or plus or minus 0.5°C, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity greater than 44 MW. [35 IAC 220.270(b)(1)] The engines are excluded from the requirement to install a temperature monitoring device equipped with a continuous recorder, however, the engines must be operated and maintained in accordance with the engine manufacturers recommendations

   ii. A device that records flow to or bypass of the control device. The owner or operator shall either: [35 IAC 220.270(b)(2)]

      A. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device every 15 minutes. [35 IAC 220.270(b)(2)(A)] As an approved alternative, Install, calibrate, and maintain a gas flow rate measuring device to monitor landfill gas flow on a continuous basis, to record an hourly flow average within the flow meter software, and to report flow to the

engines on a monthly basis using a monthly average of the hourly data. For the enclosed flare(s), the Permittee shall monitor the flow at the orifice plate on a weekly basis when in use.

B. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line. [35 IAC 220.270(b)(2)(B)]

c. Open flare. Each owner or operator of an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment: [35 IAC 220.270(c)]

i. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame. [35 IAC 220.270(c)(1)]

ii. A device that records flow to or bypass of the flare. The owner or operator shall either: [35 IAC 220.270(c)(2)]

A. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or [35 IAC 220.270(c)(2)(A)]

B. Secure the bypass line valve in the closed position with a car-seal or 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. [35 IAC 220.270(c)(2)(B)]

d. Each owner or operator seeking to install a collection or control system that does not meet the specifications in Condition 7.1.3(d) and (e), shall provide information satisfactory to the Illinois EPA describing the design and operation of the collection system, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. [35 IAC 220.270(d)]

e. Each owner or operator shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in Condition 7.1.12(c) and (d). Any inactive landfill that has no monitored exceedances of the

operational standard in three consecutive quarterly monitoring periods must resume annual monitoring. Any methane reading of 500 ppm or more above the background detected during the annual monitoring returns the monitoring frequency for that landfill to quarterly. [35 IAC 220.270(e)]

f. General Requirements

i. The Permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment, pursuant to 35 IAC 201.281:

A. A gas flow rate measuring device that shall record the flow to the control system(s) (e.g., the gas flow to utility (open) flare(s) and/or turbines) at least every 15 minutes [35 IAC 201.281];

B. A gas flow rate measuring device that provides a measurement of gas flow to or bypass of the control system. The owner or operator shall either [35 IAC 201.281]:

1. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control system at least every 15 minutes; or

2. Secure the bypass line valve(s) in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve(s) are maintained in the closed position and that the gas flow is not diverted through the bypass line(s).

C. As applicable, 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 on any flare installed at the source.

ii. The Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. [35 IAC 220.240(c)(5)]

7.1.9 Recordkeeping Requirements

Except as provided in 7.1.3(m), the Permittee shall comply with the following section as applicable.

In addition to the records required by Condition 5.9, the Permittee shall maintain records of the following items for the affected landfill to demonstrate compliance with Conditions 5.6.1, 5.6.3, 7.1.3, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

The Permittee is subject to the requirements of 35 IAC 220.290 - Recordkeeping Requirements:

Each owner or operator of an MSW landfill shall keep for at least 5 years, unless another time period is specified in Condition 7.1.9, up-to-date, readily accessible, on-site records of the following: [35 IAC 220.290]

a. For the life of the landfill, the design capacity report in which the landfill became equal to or greater than 2.5 million Mg and 2.5 million m^3, 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. [35 IAC 220.290(a)]

b. For the life of the control equipment, the data listed in Condition 7.1.9(b)(i) through (iv) as measured during the initial performance test or compliance determination. Records of the control device vendor specifications shall be maintained until removal. [35 IAC 220.290(b)]

   i. Active collection systems: [35 IAC 220.290(b)(1)]

      A. The maximum expected gas generation flow rate as calculated in Condition 7.1.12(a). The owner or operator may use another method to determine the maximum gas generation flow rate, if the method has been approved by the Illinois EPA. [35 IAC 220.290(b)(1)(A)]

      B. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in Condition 7.1.3(e)(i)(A). [35 IAC 220.290(b)(1)(B)]

   ii. Enclosed combustion device other than a boiler or process heater with a design heat input capacity greater 44 MW: [35 IAC 220.290(b)(2)]

      A. The combustion temperature measured at least every 15 minutes and averaged over the same time period as the performance test. [35 IAC

220.290(b)(2)(A)] As an alternative, the Permittee is excluded from the requirement to keep and maintain records of engine combustion temperatures. However, the Permittee must keep records of engine inspections, maintenance, and repairs.

B. The percent reduction of NMOC determined as specified in Condition 7.1.3(i)(ii) achieved by the control device. [35 IAC 220.290(b)(2)(B)]

iii. Boilers or process heaters of any size: a description of the location at which the collected gas vent stream is introduced into the boiler or process heater over the same time period as the performance testing. [35 IAC 220.290(b)(3)]

iv. Open flare: 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, incorporated by reference in 35 IAC 220.130 of this Part; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the flare pilot flame or the flare flame is absent. [35 IAC 220.290(b)(4)]

c. Continuous records of the equipment operating parameters specified to be monitored in Condition 7.1.8 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. [35 IAC 220.290(c)]

i. The following constitute exceedances that shall be recorded and reported under Condition 7.1.10(e): [35 IAC 220.290(c)(1)]

A. For enclosed combustors, except for boilers and process heaters with design heat input of 44 MW (150 mmBtu/hr) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28°C (82°F) below the average combustion temperature during the most recent performance test at which compliance with Condition 7.1.3(i)(ii) was determined. [35 IAC 220.290(c)(1)(A)] The Permittee is excluded from the requirement to keep and maintain records of exceedances of the engines based upon 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.

ii. 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 pursuant to Condition 7.1.8. [35 IAC 220.290(c)(2)]

iii. For open flares, records of the flame or flare pilot flame monitoring specified under Condition 7.1.8(c), and all periods of operation in which the flare pilot flame or the flare flame is absent. [35 IAC 220.290(c)(4)]

d. For the life of the collection system, a plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector, including: [35 IAC 220.290(d)]

i. The location of all newly installed collectors as specified under Condition 7.1.12(b). [35 IAC 220.290(d)(1)]

ii. The nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection, as provided in Condition 7.1.3(e)(i)(D)(1), as well as any nonproductive areas excluded from collection as provided in Condition 7.1.3(e)(i)(D)(2) [35 IAC 220.290 (c)(2)]

e. All collection and control system exceedances of the operational standards in Condition 7.1.5, the reading the subsequent month whether or not the second reading is an exceedence, and the location of each exceedence. [35 IAC 220.290(e)]

f. Owners or operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million Mg or 2.5 million m^3, as provided in the definition of “design capacity”, shall keep records of the annual recalculation of site-specific density, design capacity, and the supporting documentation. [35 IAC 220.290(f)]

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

i. Site-specific NMOC emission rate(s) and/or methane generation rate constant(s) (k) used to determine MSW landfill emissions (megagrams/yr);

ii. Records of the monthly and aggregate annual CO, VOM, PM, NO_x and SO_2 emissions from the affected MSW

landfills associated control system, calculated based on procedures in Condition 7.1.12, with supporting calculations (tons/mo and ton/yr);

iii. Inspections:

A. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

B. The date of each inspection where it was determined by the Permittee that it was necessary to implement the control measures;

C. The dates the control measures were implemented.

D. On a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

iv. 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).

v. Copies of USEPA or Illinois EPA approval of changes to compliance procedures in Condition 7.1.12.

vi. Records of disposal of any asbestos-containing waste material.

h. The Permittee shall keep records as specified in 40 CFR Part 60 Subparts A and WWW and in 40 CFR 63 Subparts A and AAAA. These records shall include but are not limited to the following:

i. The Permittee shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. [40 CFR 60.758(a)]

ii. The Permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in 40 CFR 60.758(b)(1) through (b)(4) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be

maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal. [40 CFR 60.758(b)]

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

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

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

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

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

2. The percent reduction of NMOC determined as specified in 40 CFR 60.752(b)(2)(iii)(B) achieved by the control device. [40 CFR 60.758(b)(2)(ii)]

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

D. Records to demonstrate compliance with 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. The Permittee shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. [40 CFR 60.758(c)]

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

1. For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28°C below the average combustion temperature during the most recent performance test at which compliance with 40 CFR 60.752(b)(2)(iii) was determined. [40 CFR 60.758(c)(1)(i)]

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

B. The Permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756. [40 CFR 60.758(c)(2)]

iv. The Permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification

location label for each collector. These shall include: [40 CFR 60.758(d)]

A. Up-to-date, readily accessible records of the installation date and location of all newly installed collectors as specified under 40 CFR 60.755(b). [40 CFR 60.758(d)(1)]

B. Readily accessible documentation of the nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection as provided in 40 CFR 60.759(a)(3)(i) as well as any nonproductive areas excluded from collection as provided in 40 CFR 60.759(a)(3)(ii). [40 CFR 60.758(d)(2)]

v. The Permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. [40 CFR 60.758(e)]

vi. The Permittee must keep those records specified in the general provisions of 40 CFR Part 60 and Part 63 (See Table 1 of 40 CFR 63 Subpart AAAA).

7.1.10 Reporting Requirements

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

a. Each owner and operator shall submit a design capacity report to the Illinois EPA. [35 IAC 220.280(a)]

i. The initial design capacity report shall contain the following information: [35 IAC 220.280(a)(2)]

A. A map or plot of the landfill providing the size and location of the landfill and identifying all areas where solid waste may be land filled according to the provisions of the State or RCRA construction or operating permit. [35 IAC 220.280(a)(2)(A)]

B. The maximum design capacity of the landfill. If the maximum design capacity is specified in a State construction or RCRA permit, a copy of the permit specifying the maximum design capacity of the landfill shall be provided. If

the maximum design capacity of the landfill is not specified in a permit, the maximum design capacity shall be calculated using good engineering practices. The calculations shall be provided, along with the relevant parameters (e.g., depth of solid waste, solid waste acceptance rate, and compaction practices, as applicable), as part of the report. The Illinois EPA may request other reasonable information as may be necessary to verify the maximum design capacity of the landfill. [35 IAC 220.280(a)(2)(B)]

ii. An amended design capacity report shall be submitted to the Illinois EPA providing notification of an increase in the design capacity of the landfill within 90 days after an increase in the maximum design capacity of the landfill to or above 2.5 million Mg and 2.5 million m^3. This increase in design capacity may result from an increase in the permitted volume or an increase in the density of the landfill as documented in the annual recalculation required in Condition 7.1.9. [35 IAC 220.280(a)(3)]

b. Each owner and operator with a total design capacity equal to or greater than 2.5 million Mg and 2.5 million m^3 shall submit an NMOC emission rate report to the Illinois EPA initially and by June 1 annually thereafter, except as provided for in Condition 7.1.10(b)(i) through (iv) (Below). The Illinois EPA may request such additional information as may be necessary to verify the reported NMOC emission rate. The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures in Condition 7.1.7(a), as applicable. The annual NMOC emission rate report must be submitted with the annual emissions report required pursuant to 35 IAC 201.302(a). [35 IAC 220.280(b)]

i. The initial NMOC emission rate report may be combined with the initial design capacity report required in Condition 7.1.10(a). The first NMOC emission report shall be filed with the Illinois EPA by October 29, 1998. Subsequent NMOC emission reports shall be filed with the Illinois EPA by June 1 of the subsequent year, except as provided for in Condition 7.1.10(b)(ii). [35 IAC 220.280(b)(1)]

ii. Using *Tier 1*, if the estimated NMOC emission rate as reported in the annual report to the Illinois EPA is less than 50 Mg/yr in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid

waste in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Illinois EPA. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Illinois EPA. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate. [35 IAC 220.280(b)(2)]

iii. The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. [35 IAC 220.280(b)(3)]

iv. All owners and operators of MSW landfills with a total design capacity of 2.5 million Mg and 2.5 million m^3 are required to submit an annual emissions report pursuant to 35 IAC 201.302(a). MSW landfills that have installed a gas collection and control system that meets the requirements of 35 IAC 220 are not required to submit an annual NMOC emission rate report but are required to submit an annual emissions report pursuant to 35 IAC 201.302(a). Further, owners or operators filing a 5-year estimate of NMOC emissions pursuant to Condition 7.1.10(b)(ii) may use a 5-year estimate for NMOC, so long as they file an annual emission report and meet the requirements of Condition 7.1.10(b)(ii). [35 IAC 220.280(b)(4)]

c. Each owner or operator subject to the provisions of Condition 7.1.3(e) shall submit an application for a construction permit containing the information listed in Condition 7.1.10(c)(iii) (Below) to the Illinois EPA within 1 year after the first report, required under Condition 7.1.10(b), in which the emission rate exceeds 50 Mg/yr, except as follows: [35 IAC 220.280(c)]

i. If the owner or operator elects to recalculate the NMOC emission rate after *Tier 2* NMOC sampling and analysis as provided in Condition 7.1.7(a) and the resulting rate is less than 50 Mg/yr, annual periodic reporting shall be resumed, using the *Tier 2* determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 Mg/yr or the landfill is inactive. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 1 year after the

first calculated exceedence of 50 Mg/yr. [35 IAC 220.280(c)(1)]

ii. If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant k, as provided in *Tier 3* in Condition 7.1.7(a), and the resulting emission rate is less than 50 Mg/yr, annual periodic reporting shall be resumed or the landfill is inactive. The resulting site-specific methane generation rate constant k shall be used in the emission rate calculation until such time as the emission rate calculation results in an exceedence. The revised NMOC emission rate report based on the provisions of *Tier 3* and the resulting site-specific methane generation rate constant k shall be submitted to the Illinois EPA within 1 year after the first calculated emission rate exceeding 50 Mg/yr. [35 IAC 220.280(c)(2)]

iii. In addition to the information required by 35 IAC 201.152, the following shall be included in the construction permit application for the collection system required pursuant to Condition 7.1.10(c): depths of refuse, refuse gas generation rates and flow characteristics, cover properties, gas system expandability, leachate and condensate management, accessibility, compatibility with filling operations, integration with closed landfill end use, air intrusion control, corrosion resistance, fill settlement, and resistance to the refuse decomposition heat. [35 IAC 220.280(c)(3)]

d. Each owner or operator of a controlled landfill shall submit the information required by Condition 7.1.10(d) (Below) to the Illinois EPA 30 days prior to removal or cessation of operation of the control equipment. The Illinois EPA may request such additional information as may be necessary to verify that all of the conditions for removal of equipment in accordance with Section Condition 7.1.5(h) have been met. [35 IAC 220.280(d)]

i. Certification that the operation of the collection and control system is no longer required pursuant to 35 IAC Subtitle G; [35 IAC 220.280(d)(1)]

ii. Documentation demonstrating that the 15-year minimum control period has expired; and [35 IAC 220.280(d)(2)]

iii. Dated copies of the 3 successive NMOC emission rate reports, as provided for in Condition 7.1.6(h), demonstrating that the landfill is no longer producing 50 Mg/yr or greater of NMOC, pursuant to Condition 7.1.7(b). [35 IAC 220.280(d)(3)]

e. Each owner or operator of a landfill shall submit to the Illinois EPA annual reports of the recorded information in Condition 7.1.10(e)(i) through (vi) (Below). (Note: Pursuant to 40 CFR 63.1980(a), this report shall be submitted every six months) The initial annual report shall be submitted within 180 days after installation and start-up of the collection and control system, and may be included with the report of the initial performance test required pursuant to Condition 7.1.3(c)(iii)(B)(I). For enclosed combustion devices and flares, reportable exceedances are defined under Condition 7.1.9(c). [35 IAC 220.280(e)]

   i. Value and length of time for exceedence of applicable parameters monitored under Condition 7.1.8(a) through (d). [35 IAC 220.280(e)(1)]

   ii. 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 Condition 7.1.8. [35 IAC 220.280(e)(2)]

   iii. 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. [35 IAC 220.280(e)(3)]

   iv. All periods when the collection system was not operating in excess of 5 days. [35 IAC 220.280(e)(4)]

   v. The location of each exceedence of the 500 ppm methane concentration, as provided in Condition 7.1.5(d), and the concentration recorded at each location for which an exceedence was recorded in the previous month. [35 IAC 220.280(e)(5)]

   vi. The date of installation and the location of each well or collection system expansion added pursuant to Condition 7.1.12(a)(iii), (b) and (c)(iv). [35 IAC 220.280(e)(6)]

f. Each owner or operator shall include the following information with the initial performance test report and any subsequent performance tests. [35 IAC 220.280(f)]

   i. 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; [35 IAC 220.280(f)(1)]

ii. 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; [35 IAC 220.280(f)(2)]

iii. 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; [35 IAC 220.280(f)(3)]

iv. The sum of gas generation flow rates for all areas from which collection wells have been excluded based on no productivity and the calculations of gas generation flow rate for each excluded area; [35 IAC 220.280(f)(4)]

v. 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; and [35 IAC 220.280(f)(5)]

vi. The provisions for the control of off-site migration of gas. [35 IAC 220.280(f)(6)]

g. The Permittee shall notify the Illinois EPA within 30 days of an exceedance of the limits in Conditions 7.1.3, 7.1.5, or 7.1.6. The notification shall include:

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

ii. Duration of the possible exceedance.

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

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

v. When compliance was reestablished.

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

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

7.1.11 <u>Operational Flexibility/Anticipated Operating Scenarios</u>

Operational flexibility is not set for the affected MSW Closed Landfill.

7.1.12 Compliance Procedures

Compliance with the limits in Conditions 5.6.1 and 7.1.6 shall be based on the recordkeeping requirements in Condition 7.1.10 and the emission factors and formulas listed below:

The Permittee is subject to the requirements of 35 IAC 220.240 - Compliance Procedures for Gas Collection Systems:

a. The methods specified in Condition 7.1.12(a)(i) through (vi) (Below) shall be used to determine whether the gas collection system is in compliance with Condition 7.1.3(e) through (i). [35 IAC 220.240(a)]

i. To calculate the maximum expected gas generation flow rate from the MSW landfill, one of the following equations shall be used. The k and L_o kinetic factors shall be those published in the Compilation of Air Pollutant Emission Factors (AP-42) incorporated by reference in 35 IAC 220.130, or other site-specific emission factors approved by the Illinois EPA. If k has been determined as specified in Condition 7.1.7(a)(iv), the value of k determined from the test shall be used. A value of no more than 15 years shall be used for the intended use period of the gas mover equipment, the variable t. The active life of the landfill is the age of the landfill plus the estimated number of years until closure. [35 IAC 220.240(a)(1)]

A. For sites with unknown year-to-year solid waste acceptance rate: [35 IAC 220.240(a)(1)(A)]

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

Where:

Q_m = Maximum expected gas generation flow rate, m^3/yr

L_o = Methane generation potential, m^3 per Mg solid waste

R = Average annual acceptance rate, Mg/yr

k = Methane generation rate constant, yr^{-1}

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

installed after closure, t in years is the age of the landfill at installation

c = Time since closure, years (for an active landfill c = 0 and $e^{-kc}=1$)

B. For sites with known year-to-year solid waste acceptance rates: [35 IAC 220.240(a)(1)(B)]

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

Where:

Q_m = Maximum expected gas generation flow rate, m^3/yr

k = Methane generation rate constant, yr^{-1}

L_o = Methane generation potential, m^3 per Mg solid waste

M_i = Mass of solid waste in the ith section, Mg

t_i = Age of the ith section, yr

C. If a collection and control system has been installed, actual flow data may be used to project the maximum expected gas generation flow rate instead of, or in conjunction with, the equations in Condition 7.1.12(a)(i)(A) and (B). If the landfill is still accepting waste, the actual measured flow data will not equal the maximum expected gas generation rate, so calculations made using the equations in Condition 7.1.12(a)(i)(A) or (B) or other methods shall be used to predict the maximum gas generation rate over the intended period of use of the gas control system equipment. [35 IAC 220.240(a)(1)(C)]

ii. For the purpose of determining the sufficient number of gas collectors, the owner or operator shall design a system of vertical wells, horizontal collectors, or other type of collection device, capable of controlling and extracting gas from all portions of the landfill sufficient to meet the operational and performance standards of Condition 7.1.3(e) through (i), 7.1.5 and 7.1.12. Such design must be approved by the Illinois EPA as part of an air construction permit or a CAAPP permit, if the gas collection system was installed prior to July 31, 1998. [35 IAC 220.240(a)(2)]

iii. For the purpose of demonstrating whether the gas collection system flow rate of an active collection system is sufficient, the owner or operator shall measure gauge pressure in the gas collection header at each individual well monthly. If positive pressure exists, action shall be initiated to correct the exceedence within 5 calendar days, except for the three conditions allowed under Condition 7.1.5(b). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days after the first measurement, the gas collection system shall be expanded to correct the exceedence within 120 days after the initial measurement of positive pressure. Any attempted corrective measure must not cause exceedances of other operational or performance standards. An alternate timeline for correcting the exceedence may be submitted to the Illinois EPA for approval. [35 IAC 220.240(a)(3)]

iv. Owners or operators are not required to expand the system, as required in Condition 7.1.12(a)(iii), during the first 180 days after gas collection system startup. [35 IAC 220.240(a)(4)]

v. For purposes of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well on a monthly basis for temperature and nitrogen or oxygen, as provided in Condition 7.1.5(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedence within 5 calendar days. If correction of the exceedence cannot be achieved within 15 calendar days after the first measurement, the gas collection system shall be expanded to correct the exceedence within 120 days after the initial exceedence. An alternate timeline for correcting the exceedence may be submitted to the Illinois EPA for approval. [35 IAC 220.240(a)(5)]

vi. An owner or operator using a collection system that does not conform to the specifications provided in Condition 7.1.3(f) and (g) shall provide information satisfactory to the Illinois EPA, as specified in Condition 7.1.3(h), demonstrating that off-site migration is being controlled. [35 IAC 220.240(a)(6)]

b. To comply with the operational standards in Condition 7.1.5(a), each owner or operator of a controlled landfill shall install each well or design component as specified in a construction permit issued by the Illinois EPA. Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of: [35 IAC 220.240(b)]

i. 5 years or more if active; or [35 IAC 220.240(b)(1)]

ii. 2 years or more if closed or at final grade. [35 IAC 220.240(b)(2)]

c. The following procedures shall be used for compliance with the surface methane operational standard as provided in Condition 7.1.5(d). [35 IAC 220.240(c)]

i. After installation of the collection system, the owner or operator 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 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 7.1.12(d). [35 IAC 220.240(c)(1)] As an exception, Dangerous areas such as roadways, the active areas of the landfill, truck traffic, and steep sloped areas with a grade equal to 4:1 are excluded from the surface monitoring plan (See Condition 7.1.3(L)(i)).

ii. 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. [35 IAC 220.240(c)(2)]

iii. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130, except that the probe inlet shall be placed within 5 to 10 cm of the ground. Monitoring shall be performed during typical meteorological conditions. [35 IAC 220.240(c)(3)]

iv. Any reading of 500 ppm or more above background at any location shall be recorded as a monitored exceedence and the actions specified in Condition 7.1.12(c)(iv)(A) through (E) (Below) shall be taken. As long as the actions specified below are taken, the exceedence is not a violation of the operational requirements of Condition 7.1.5(d). [35 IAC 220.240(c)(4)]

A. The location of each monitored exceedence shall be marked and the location recorded. [35 IAC 220.240(c)(4)(A)]

B. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedence

shall be made and the location shall be remonitored within 10 calendar days after detecting the exceedence. [35 IAC 220.240(c)(4)(B)]

C. If the remonitoring of the location shows a second exceedence, additional corrective action shall be taken and the location shall be monitored again within 10 days after the second exceedence. If the remonitoring shows a third exceedence for the same location, the action specified in Condition 7.1.12(c)(iv)(E) (Below) shall be taken. No further monitoring of that location is required until the action specified in Condition 7.1.12(c)(iv)(E) has been taken. [35 IAC 220.240(c)(4)(C)]

D. If the remonitoring of the location does not show an exceedence, as specified by Condition 7.1.12(c)(iv)(B) or (C), the location shall be remonitored 1 month from the initial exceedence. If the 1 month remonitoring shows a concentration less than 500 ppm above background, no further monitoring of that location is required until the next quarterly monitoring period. If the 1 month remonitoring shows an exceedence, the actions specified in Condition 7.1.12(c)(iv)(C) or (E), as appropriate, shall be taken. [35 IAC 220.240(c)(4)(D)]

E. For any location where there are three monitored exceedances within a quarterly period, a new well or other collection device shall be installed within 120 calendar days after the initial exceedence. An alternate remedy to the exceedence, 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. [35 IAC 220.240(c)(4)(E)]

d. The following instrumentation specifications and procedures for surface emission monitoring devices apply to the monitoring required by Condition 7.1.12(c): [35 IAC 220.240(d)]

i. The portable analyzer shall meet the instrument specifications provided in Section 3, Method 21, Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130, except that methane shall replace all references to VOC. [35 IAC 220.240(d)(1)]

ii. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air. [35 IAC 220.240(d)(2)]

iii. To meet the performance evaluation requirements in Section 3.1.3, Method 21, Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130, the instrument evaluation procedures of Section 4.4 of Method 21, Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130, shall be used. [35 IAC 220.240(d)(3)]

iv. The calibration procedures provided in Section 4.2, Method 21, Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130, shall be followed immediately before commencing a surface monitoring survey. [35 IAC 220.240(d)(4)]

e. The MSW landfill owners or operators are required to comply with the provisions of 35 IAC 220 at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction must not exceed 5 days for collection systems and must not exceed 1 hour for treatment or control devices. [35 IAC 220.240(e)]

f. For the purpose of estimating controlled methane, NMOC, and speciated emissions can be calculated from the MSW landfill operating data and the *USEPA Landfill Gas Emissions Model* (See http://www.epa.gov/ttn/chief and AP-42, Chapter 2.4).

g. Enclosed flare emissions shall be calculated based upon the following representative emission factors and landfill gas flow rate records:

Pollutant	Emission Factor (Lb/hr)
CO	21.0
NO_x	7.7
PM	0.17
SO_2	0.59
VOM	0.63

These are special calculated emission factors for this landfill based on material balance data as indicated in the application.

h. Utility flare emissions shall be calculated based upon the following representative emission factors and landfill gas flow rate records:

Pollutant	Emission Factor (Lb/hr)
CO	11.55
NO_x	2.55
PM	0.128
SO_2	0.75
VOM	0.265

These are special calculated emission factors for this landfill based on material balance data as indicated in the application.

i. For the purpose of estimating fugitive PM emissions from the paved and unpaved roadways at the source, the emission factors and formulas in the latest version of AP-42 are acceptable.

7.2 Engines

7.2.1 Description

Landfill gas supplied by the active gas collection system is fired in the reciprocating engines for the production of electricity. The landfill gas supplied by the active gas collection system is processed through the "Landfill Gas Treatment System" prior to being fired in the reciprocating engines.

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
Engine #1	Landfill Gas Fired Reciprocating Engine	December, 1991	None
Engine #2	Landfill Gas Fired Reciprocating Engine	December, 1991	None

7.2.3 Applicable Provisions and Regulations

a. The "affected Engines" for the purpose of these unit-specific conditions, are Engines described in Conditions 7.2.1 and 7.2.2.

b. The affected engines are subject to 35 IAC 214.301, which provides that:

   No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm. [35 IAC 214.301]

c. Each affected engine is subject to 35 IAC 218.301, which provides that:

   No person shall cause or allow the discharge of more than 3.6 Kg/Hr (8 Lb/Hr) of organic material into the atmosphere from any emission unit, except as provided in Sections 218.302, 218.303, 218.304, and the following exception: If no odor nuisance exists the limitation of this Condition shall apply only to photochemically reactive material. [35 IAC 218.301]

7.2.4 Non-Applicability of Regulations of Concern

a. The affected engines are not subject to Nonmethane Organic Compounds, 35 IAC 220, because the affected engines are fired on landfill gas that has been treated in accordance

with 40 CFR 60.752(b)(2)(iii)(c) prior to combustion in the affected engines.

b. The affected engines are not subject to 40 CFR Part 63, Subpart AAAA, because the affected engines are fired on landfill gas that has been treated in accordance with 40 CFR 60.752(b)(2)(iii)(c) prior to combustion in the affected engines.

c. The affected engines are not subject to the control system monitoring provisions of 40 CFR Part 60, Subpart WWW (i.e.,40 CFR 60.756(b)), because the affected engines are fired on landfill gas that has been treated in accordance with 40 CFR 60.752(b)(2)(iii)(c) prior to combustion in the affected engines.

d. The non-applicability of 35 IAC 220, 40 CFR Part 63, Subpart AAAA, and 40 CFR Part 60, Subpart WWW (i.e.,40 CFR 60.756(b)) as stated in Condition 7.2.4(a),(b),and(c) above is based on landfill gas being treated in accordance with 40 CFR 60.752(b)(2)(iii)(C) prior to combustion in the affected engines, so that the engines are not subject to the 35 IAC 220 and NESHAP for Municipal Solid Waste Landfills pursuant to the site specific determination made by the USEPA letter dated February 10, 2004 for this source.

   If an affected engine is relied upon in the future to demonstrate compliance with 35 IAC 220, the Permittee shall conduct timely performance testing for an engine following replacement of an engine, as required pursuant to 35 IAC 220.

e. The affected engines are not subject to 35 IAC 212.321 or 212.322 because they do not have a process weight rate as defined in 35 IAC 211.5250.

f. The affected engines are not subject to 35 IAC 217.121 because the engines are not fuel combustion emission units.

g. The affected engines are not subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected engines do not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 <u>Control Requirements and Work Practices</u>

a. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate any affected engines in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois

EPA or the USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]

b. Landfill gas shall be the only fuel fired in the affected engines.

7.2.6 Production and Emission Limitations

In addition to Condition 5.3.2 and the source-wide emission limitations in Condition 5.6, the affected engines are subject to the following:

a. Emissions from each affected engine shall not exceed the following limits:

Pollutant	lb/hr	ton/yr
NO_x	5.06	22.22
SO_2	1.80	8.00
VOM	0.56	2.50
CO	6.34	27.84

The above limitations contain revisions to previously issued Permit 95090109. The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically PSD. These limits continue to ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, emission limits for NO_x and CO were reduced based on improved engine performance pursuant to Construction Permit #05050046. [T1R]

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total). [T1]

7.2.7 Testing Requirements

The Permittee 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.

7.2.8 Monitoring Requirements

Monitoring requirements are not set for the affected engines

7.2.9 Recordkeeping Requirements

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

a. Monthly landfill gas volumetric throughput through the active gas collection system to the affected engines.

b. Landfill gas methane content and net heating content (Btu/cubic foot) determined on at least an annual basis.

c. Operating hours for each affected engine per month.

d. Any additional landfill gas analyses that may be conducted during the normal operation of the gas collection system.

e. The Permittee shall maintain the following records at the source for the engine replacement activities authorized by this permit:

    i. A file containing the paperwork for original and replacement engine components or engines, including documentation for engine model numbers and serial numbers and copies of the specifications for the engines.

    ii. Details of activities performed pursuant to this permit including the date that the engine is removed from the service and the date the engine is returned to service.

    iii. Records for the alternative handling of landfill gas during the period that engine(s) are not in service.

    iv. Records required by Condition 7.2.9(e)(i)(ii) and (iii) shall be retained for at least five years after the date that the affected engine is permanently removed from service.

7.2.10 Reporting Requirements

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

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

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

   ii. Duration of the possible exceedance.

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

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

   v. When compliance was reestablished.

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

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

   ii. The annual emissions of CO, VOM, NO_x and SO_2 for the affected engines for each month of the previous year, to demonstrate compliance with Condition 7.2.6 (e.g., for the month of January, the emissions from February of the preceding calendar year through January, for the month of February, the emissions from March of the preceding calendar year through February, 12 months in all).

c. The Permittee shall notify the Illinois EPA prior to carrying out engine replacement activities pursuant to this permit. This notification shall be submitted at least 30 days in advance of carrying out activities or as soon as it is practicable to do so, e.g., in the event of engine failure. This notification shall include:

   i. A description of the activities that are to be performed and the expected schedule for the activities.

ii. Confirmation that the activities fall within the authorization provided by this permit, the replacement is or will be in good operating conditions, and the outage of an engine will not prevent or interfere with compliance with applicable requirements for control of emissions, with supporting information.

iii. The source's determination whether the activities involve installation of a new or reconstructed engine, and identification of the current status of the source with respect to emissions of HAPs, i.e., major or non-major, with explanation.

d. Two copies of all notifications, required by Condition 7.2.10(c) above shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to the affected engines 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. Pursuant to Construction Permit #05050046, the Permittee is authorized to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of engines and engine components replacement for Engines 1 and 2, as described in the above referenced construction permit and is subject to the following special conditions:

i. This permit authorizes installation of manufacturer supplied replacement components or replacement engines for "Engines 1 and 2" (the affected engines), that takes place either as part of scheduled maintenance of an engine or in the event of malfunction or outage and subsequent repairs of an engine. The authorization provided by this permit for each affected engine will terminate when the

engine is permanently removed from service or 30 days after notification from the Illinois EPA that this permit is being terminated, whichever occurs first. For the purpose of this permit, Engines 1 and 2 and their successors (i.e., replacement engines and engines with replacement components as addressed by this permit) are referred to as the "affected engines". This authorization does not address activities for the affected engines for which a construction permit is not required, such as routine preventive maintenance, minor replacement of engine components, or activities that do not involve, either directly or indirectly, emission-related components of the engines.

ii. This authorization is limited to activities that can be accommodated by the original installation of Engines 1 and 2 and that are performed in conjunction with an ongoing program of maintenance, repair, and replacement, so as to not constitute a modification with respect to PSD or nonattainment NSR. This authorization does not extend to installation of a replacement engine that is a different make and model than the original engine or to activities that are intended to, or would have the result of, increasing the design capacity of an engine.

iii. The Permittee shall maintain the affected engines with electronic ignition system and improved air/fuel ratio controller, as indicated in the application for Construction Permit #05050046, to reduce NO_x emissions from the engines.

b. As replacement activities authorized by this permit are performed that involve operation of new or reconstructed engine(s):

1. If the source is a major source of emissions of HAPs when such an activity occurs, the Permittee must still meet the initial notification requirements of 40 CFR 63.6645(d) for such engine and minimize HAP emissions pursuant to 40 CFR 63.6625(c), submit annual reports pursuant to 40 CFR 63.6650(g), and conduct daily monitoring and recordkeeping for fuel flow by type pursuant to 40 CFR 63.6655(c).

2. If the source is a major source of emissions of HAPs and landfill gas makes up less than 10% of the gross heat input to such engine(s) on an annual basis, the Permittee must comply with emission standards of the NESHAP for new or reconstructed engines, with emission testing for the engine(s) conducted in a timely manner after resuming operation.

7.2.12 <u>Compliance Procedures</u>

a. Compliance with the emission limits in Conditions 5.6 and 7.2.2(6) is addressed by the records and reports required in Conditions 7.2.9(a)through(d) and 7.2.10(a)and(b) and the emission factors and formulas listed below:

i. Emission factors for the affected engines:

Pollutant	Emission Factors (pounds/hour)
CO	6.354
NO_X	5.06
VOM	0.60
SO_2	1.80

These emission factors are based on the Manufacturer’s performance data supplied by the Permittee.

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 _____Error! Bookmark not defined. (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]:

Monitoring Period	Report Due Date
January - June	September 1
July - December	March 1

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

8.6.2 Test Notifications

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

a. The name and identification of the affected unit(s);

b. The person(s) who will be performing sampling and analysis and their experience with similar tests;

c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;

d. The specific determinations of emissions and operation that are intended to be made, including sampling and monitoring locations;

e. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods;

f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

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

8.6.3 Test Reports

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

a. The name and identification of the affected unit(s);

b. The date and time of the sampling or measurements;

c. The date any analyses were performed;

d. The name of the company that performed the tests and/or analyses;

e. The test and analytical methodologies used;

f. The results of the tests including raw data, and/or analyses including sample calculations;

g. The operating conditions at the time of the sampling or measurements; and

h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

a. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Unit with a copy sent to the Illinois EPA - Air Regional Field Office.

b. As of the date of issuance of this permit, the addresses of the offices that should generally be utilized for the submittal of reports and notifications are as follows:

i. Illinois EPA - Air Compliance Unit

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

ii. Illinois EPA - Air Quality Planning Section

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

iii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

iv. USEPA Region 5 - Air Branch

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

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

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

8.7 Title I Conditions

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

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

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

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

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

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

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

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

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

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

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of

such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

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

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

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

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

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

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

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

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

9.4 Obligation to Comply with Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

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

b. Other records required by this permit including any logs, plans, procedures, or instructions required to be kept by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

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

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

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

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

9.9 Certification

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

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

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

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

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

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

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

iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions

that exceeded the emission limitations, standards, or regulations in this permit.

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

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

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

9.12.2 Reopening and Revision

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

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

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

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

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

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

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

9.14 Permit Expiration and Renewal

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

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

9.15 General Authority for the Terms and Conditions of this Permit

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

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

10.0 ATTACHMENTS

Attachment 1 Example Certification by a Responsible Official

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

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

Attachment 2 Emissions of Particulate Matter from Process Emission Units

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

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

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

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

where:

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

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

	Metric	English
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):

	Metric	English
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
Mg/hr	kg/hr	T/hr	lb/hr
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):

	Metric	English
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):

	Metric	English
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 Mg/hr	E kg/hr	English P T/hr	E lb/hr
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.pd