217/782-2113

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

PERMITTEE

Resource Technology Corporation
Attn: John Connolly
330 South Wells Street, Suite 711
Chicago, Illinois 60606

Application No.: 98020049 I.D. No.: 167120AMV
Applicant's Designation: Date Received: February 20, 1998
Operation of: Landfill Gas Combustion and Electrical Power Generation
Date Issued: November 12, 2002 Expiration Date[2]: November 12, 2002
Source Location: R.R. #9 Sandhill Road, Springfield, Sangamon County
Responsible Official: John Connolly, President, RTC

This permit is hereby granted to the above-designated Permittee to OPERATE a Landfill Gas to Energy Facility, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Michael Haggitt at 217/782-2113.

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

DES:MVH:jar

cc: Illinois EPA, FOS, Region 2
USEPA

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

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

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1.0 SOURCE IDENTIFICATION

1.1 Source

Resource Technology Corporation
R.R. #9 Sandhill Road
Springfield, Illinois 62707
312/341-4045

I.D. No.: 167120AMV
Standard Industrial Classification: 4911, Electrical Services

1.2 Owner/Parent Company

Resource Technology Corporation
330 South Wells Street, Suite 711
Chicago, Illinois 60606

1.3 Operator

Resource Technology Corporation
330 South Wells Street, Suite 711
Chicago, Illinois 60606

John Connolly, President, RTC
312/341-4045

1.4 General Source Description

The Resource Technology Corporation is located at R.R. #9 Sandhill Road, Springfield. The source operates a gas to energy facility utilizing landfill gas produced in the Sangamon Valley Landfill. For purposes of the CAAPP, Resource Technology Corporation is considered a single source with Sangamon Valley Landfill, I.D. No. 167822ABJ, located at 2565 Sandhill Road, Springfield. The source has elected to obtain separate CAAPP permits for these locations.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstract Service
CO	Carbon Monoxide
CFR	Code of Federal Regulations
ERMS	Emissions Reduction Market System
Ft^3	Cubic Feet
Gal	Gallon
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
°K	Degrees Kelvin
kPa	Kilopascals
kg	Kilograms
kW	Kilowatts
l	liters
lb	Pound
ILCS	Illinois Compiled Statutes
MBtu	Million British thermal units
Mg	Megagrams
MW	Megawatts
mmHg	Millimeters of Mercury
mmscf	Million standard cubic feet
mo	Month
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
psia	pounds per square inch absolute
PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
T1	Title I – identifies Title I conditions that have been carried over from an existing permit

T1N	Title I New – identifies Title I conditions that are being established in this permit
T1R	Title I Revised – identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
USEPA	United States Environmental Protection Agency
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material
yr	Year

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

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

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

Closed Loop Glycol Dehydration Unit

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

None

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

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

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

3.2 Compliance with Applicable Requirements

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

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

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

3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee

shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

3.3 Addition of Insignificant Activities

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

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

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

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Engine/ Generator 1	Caterpillar 399TA Reciprocating Engine Used to Generate Electricity*	January 1997	None
Engine/ Generator 2	Caterpillar 399TA Reciprocating Engine Used to Generate Electricity*	January 1997	None
Engine/ Generator 3	Caterpillar 399TA Reciprocating Engine Used to Generate Electricity*	January 1997	None
Engine/ Generator 4	Caterpillar 399TA Reciprocating Engine Used to Generate Electricity*	January 1997	None
Engine/ Generator 5	Caterpillar 399TA Reciprocating Engine Used to Generate Electricity*	January 1997	None

* Landfill gas utilized in the above emission units is generated by Sangamon Valley Landfill I.D. No. 167822ABJ.

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

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

5.1.2 This permit is issued based on the source requiring a CAAPP permit because the source is subject to a standard, limitation, or other requirement under Section 111 (NSPS) or Section 112 (HAPs) of the CAA for which USEPA requires a CAAPP permit, or because the source is in a source category designated by the USEPA, pursuant to 40 CFR 70.3(a)(2), (3), and (5) (40 CFR 70.3 Applicability) [Section 39.5(2)(a)(ii) and (iv) of the Act].

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

5.1.4 For purposes of the CAAPP, Resource Technology Corporation is considered a single source with Sangamon Valley Landfill, I.D. No. 167822ABJ, located at 2565 Sandhill Road, Springfield. The source has elected to obtain separate CAAPP permits for these locations.

It should be noted that Resource Technology Corporation is a separate entity, which has contracted with the Sangamon Valley Landfill to use the gas generated from the landfill in its landfill gas to energy facility.

5.2 Applicable Regulations

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

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

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

b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35

IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.

5.2.3 Ozone Depleting Substances

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

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

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

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

5.2.4 Risk Management Plan

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

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

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

5.2.5 Future Applicable Regulations

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

compliance certification, as required by 40 CFR Part 70 or 71.

b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

c. This stationary source will be subject to 40 CFR 63, Subpart AAAA — National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills when such rule becomes final and effective. The Permittee shall comply with the applicable requirements of such regulation by the date(s) specified in such regulation and shall certify compliance with the applicable requirements of such regulation as part of the annual compliance certification required by 40 CFR Part 70 or 71 beginning in the year that compliance is required under a final and effective rule.

5.2.7 Episode Action Plan

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

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

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

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

i. Illinois EPA, Compliance Section; and

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

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

5.3 Non-Applicability of Regulations of Concern

5.3.1 This permit is issued based on the source not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the source is subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

5.4 Source-Wide Operational and Production Limits and Work Practices

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

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

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

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	16.34
Sulfur Dioxide (SO_2)	21.90
Particulate Matter (PM)	2.41
Nitrogen Oxides (NO_x)	89.72
HAP, not included in VOM or PM	---
Total	130.37

5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per

year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

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

5.6.5 Records for Operating Scenarios

N/A

5.6.6 Retention and Availability of Records

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

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

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations with the permit

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

5.7.2 Annual Emissions Report

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

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Emissions

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

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Engine/Generators

7.1.1 Description

Landfill gas supplied by the active gas collection system is fired in the reciprocating engines for the production of electricity.

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Engine/ Generator 1	Caterpillar 399TA Reciprocating Engine Used to Generate Electricity*	None
Engine/ Generator 2	Caterpillar 399TA Reciprocating Engine Used to Generate Electricity*	None
Engine/ Generator 3	Caterpillar 399TA Reciprocating Engine Used to Generate Electricity*	None
Engine/ Generator 4	Caterpillar 399TA Reciprocating Engine Used to Generate Electricity*	None

* Landfill gas utilized in the above emission units is generated by Sangamon Valley Landfill ID# 167822ABJ.

7.1.3 Applicability Provisions and Applicable Regulations

a. The “affected engines” for the purpose of these unit-specific conditions, are the reciprocating engines described in Condition 7.1.1 and 7.1.2.

b. The affected engines are subject to the emission limits identified in Condition 5.2.2.

c. 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].

d. Each affected engines are subject to 35 IAC 215.301, 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 the following exception: If no odor nuisance

exists the limitation of this Condition shall apply only to photochemically reactive material [35 IAC 215.301].

e. The affected engines are subject to 35 IAC 220 Nonmethane Organic Compounds for air emissions from Municipal Solid Waste Landfills: (See also Condition 5.1.3)

i. For purposes of compliance with the 35 IAC 220, the affected engines are considered to be a control system utilizing enclosed combustor type control devices, as defined under 40 CFR 60.751.

ii. This permit is issued based upon the affected engines either alone or in combination with those emission units in Section 7.1, reducing NMOC emissions by 98 weight percent or reducing the outlet NMOC concentration of all control vents to less than 20 parts per million by volume (ppmv), dry basis as hexane at 3 percent oxygen. [35 IAC 220.230(b)]

iii. The Permittee shall operate the NMOC control system so as to comply with the provisions of 40 CFR 60.753. Specifically, these include:

A. Design and operation of the control system in compliance with 35 IAC 220.230, 220.250, and 220.270. 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 off the gas to the atmosphere shall be closed within one hour; [35 IAC 220.250(e)] and

B. Operation of the control system at all times when the collected gas is routed to the system. [35 IAC 220.250(f)]

f. Not withstanding the above, the Permittee shall operate the affected emission unit as follows:

i. In the event the LFG collection or control system(s) are inoperable, the gas mover system shall be shut down and all valves in the collection and control system(s) contributing to venting of the gas to the atmosphere shall be closed within 1 hour.

ii. Operate the affected engines and or flare at all times when the collected gas is routed to the system(s).

7.1.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected engines not being subject to the requirements of 35 IAC 212.321 or 212.322 because they do not have a process weight rate as defined in 35 IAC 211.5250.

b. This permit is issued based on the affected emission units not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected emission units are subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

c. This permit is issued based on the affected emission units not being subject to 40 CFR Part 72, Acid Rain Program, because each of the affected emission units serve one or more generators with the total nameplate capacity of 25 MWe or less, pursuant to 40 CFR 72.7(a)(1).

7.1.5 Operational and Production Limits and Work Practices

a. 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)].

7.1.6 Emission Limitations

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

a. This permit is issued based upon the affected engines being used to control emissions of landfill gas including emissions of nonmethane organic compounds (NMOC).

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

Pollutant	(Ton/mo)	(Ton/yr)
NO_x	16.18	70.89
CO	38.33	167.89
SO_2	0.14	0.62
VOM	3.40	14.89

These limits are based on standard emission factors and emission calculation procedures, maximum landfill gas capacity, and maximum hours of operation indicated in the application [T1].

The above limitations were established in Permit 96050067, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [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].

7.1.7 Testing Requirements

a. For the performance test required in 35 IAC 220.210(d)(2), Method 25C or Method 18, Appendix A, 40 CFR 60, incorporated by reference in Section 220.130 of this Part, 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 Agency as provided by 35 IAC 220.230(d). 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 Section 220.130 of this Part. The following equation shall be used to calculate efficiency: [35 IAC 220.260(d)]

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

Where:

$NMOC_{in}$ = Mass of NMOC Entering Control Device

$NMOC_{out}$ = Mass of NMOC Exiting Control Device

b. Within 90 days of a written request from the Illinois EPA, the Permittee shall perform emissions and/or performance tests specified by the Illinois EPA. [40

CFR 60.8(a) and 35 IAC 201.282] The 90 day time period will automatically be extended for an additional 60 days upon written request by the Permittee. The Illinois EPA may provide additional time for the performance of these tests upon written request by the Permittee.

7.1.8 Monitoring Requirements

a. The Permittee shall operate and maintain each affected emission unit according to manufacture specifications. This provision is considered to be an alternative to the temperature monitoring requirements provided under 40 CFR 60.756(b)(1). [35 IAC 201.281]

b. The Permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, equipment that will enable the continuous monitoring of each affected emission unit's hours of operation. [40 CFR 60.13(i), 60.752(e) and 35 IAC 201.281]

c. The Permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment: [40 CFR 60.756(b) and 35 IAC 201.281]

i. A gas flow rate measuring device that provides a measurement of gas flow to the control system and bypass of the control system. The owner or operator shall either:

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

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

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected engines to demonstrate compliance with Conditions 5.5, 7.1.3 and 7.1.6, 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.

7.1.10 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 7.1.3, 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.

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

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

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

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

None

7.1.12 Compliance Procedures

Compliance with Conditions 5.5 and 7.1.6 shall be determined using the recordkeeping requirements of Condition 7.1.9 and the following emission factors:

Emissions for each affected engine shall be determined by the following emission factors:

Pollutant	Emission Factor (g/bhp-hr)	Notes
NO_x	2.0 g/bhp-hr	1
CO	2.5 g/bhp-hr	1
SO_2	1.0 lb/hr	2
VOM	3.15 lb/hr	3

1 CO and NO_x emission factor based on manufacturers Emissions Data.

2 Sulfur dioxide emission factor based upon 1000 ppm H_2S and 21,329 scfh landfill gas.

3 VOM emission factor based upon 473 ppm hexane with 80% destruction.

7.2 Landfill Gas Collection and Control System

7.2.1 Description

An Active landfill gas collection and control system (GCCS).

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Active Gas Collection System	Active Gas Collection System Used to Route Landfill Gas to Engines*	Engines*

* Landfill gas utilized in the above emission units is generated by Sangamon Valley Landfill I.D.# 167822ABJ.

7.2.3 Applicability Provisions and Applicable Regulations

a. The “affected collection system” for the purpose of these unit-specific conditions, is the active gas collection system described in Condition 7.2.1 and 7.2.2.

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

c. This source is subject to 35 IAC Part 220 - Nonmethane Organic Compounds, which requires municipal solid waste landfill to install and operate gas collection and control system, within 30 months after the date when first annual NMOC emission rate report equals or exceeds 50 Mg/yr, as follows:

   i. Install and operate a gas collection system that meet the following requirements [35 IAC 220.220(a)]:

      A. Handles the maximum expected gas flow rate from the entire area of the MSW landfill that warrants control pursuant to 35 IAC 220.220(b)(1)(D) for period required in 35 IAC 220.250(h), as calculated pursuant to 35 IAC 220.240(a);

      B. Collect 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 5 years or more, if active; or 2 years or more if closed or at final grade;

C. Is designed to minimize off-site migration of subsurface gas;

D. Routes all the collected gas to a control system that complies with the requirements in 35 IAC 22.230; and

E. Collects and treats gas in accordance with the applicable requirements of 35 IAC Subtitle G.

ii. Active Collection wells, horizontal collectors, surface collector, 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.

B. The sites for gas collection devices 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.

C. Collected gas at a sufficient extraction rate, as defined at 35 IAC 220.210.

D. 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 total amount of NMOC emissions from the landfill pursuant to 35 IAC 220.220 (b)(1)(D)(ii).

iii. 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.

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.

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.

iv. 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 35 IAC 220.250(h) using the following procedures:

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 Condition 7.2.3(c)(iv)(B) shall be used.

B. For new gas collection systems, the maximum flow rate shall be in accordance with 35 IAC 220.240(a).

v. Install and operate a gas collection system that routes all the collected gas to a gas control system that complies with the following [35 IAC 220.230]:

A. An open flare designed and operated in accordance with 40 CFR 60.18.

B. A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight-percent or reduce the outlet NMOC concentration to less than 20 ppmv, dry basis as hexane at 3 percent oxygen. The reduction efficiency or ppm must be established by an initial performance test required pursuant to 35 IAC 220.210(d)(2), using the test methods required under 35 IAC 220.260(d).

C. 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 35 IAC 220.270. The initial performance test must be performed within 6 months after startup or by October 31, 2001, whichever is later.

D. Gas control systems must be operated in accordance with a permit issued pursuant to the applicable requirements of 35 IAC Subtitle G.

7.2.4 Non-Applicability of Regulations of Concern

a. This permit has been issued based on the landfill not being subject to the requirements of 40 CFR 60, Subpart WWW, Standard of Performance for Municipal Solid Waste Landfill because landfill construction or modification commenced before May 30, 1991.

b. This permit is issued based on the affected collection system not being subject to the

requirements of 35 IAC 212.321 or 212.322 because due to the unique nature of these units, a process weight rate weigh cannot be set so that such rules cannot reasonably be applied.

7.2.5 Operational and Production Limits and Work Practices

a. Permittee shall 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 5 years or more if active; or 2 years or more if closed or at final grade. [35 IAC 220.250(a)]

b. Permittee shall 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 35 IAC 220.280(e)(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.

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.

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. 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. Operating values shall be determined as follows:

i. The nitrogen level shall be determined using Method 3C, Appendix A, 40 CFR 60, incorporated by reference in 35 IAC 220.130.

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:

A. The span shall be set so that the regulatory limit is between 20 and 50 percent of the span;

B. A data recorder is not required;

C. Only two calibration gases are required, a zero and span, and ambient air may be used as the span;

D. A calibration error check is not required; and

E. The allowable sample bias, zero drift, and calibration drift are plus or minus 10 percent.

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 (such as road, the active area, truck traffic areas, and slopes steeper than or equal to 4:1) 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.

e. Permittee shall operate the gas collection and control system such that all collected gases are vented to a control system designed and operated in compliance with 35 IAC 220.230, 220.250, and 220.270. 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.

f. Permittee shall 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.

g. If monitoring demonstrates that the operational requirements in Condition 7.2.5 (b), (c), or (d) are not met, take corrective action as specified in 35 IAC 220.240(a)(3), (a)(5), or (c)(4). If such corrective actions are taken as specified in 35 IAC 220.240(a)(3), (a)(5), or (c)(4), the monitored exceedance is not a violation of the operational requirements in this condition.

h. The collection and control system may be capped or removed provided:

i. The landfill is no longer accepting solid waste;

ii. A system removal report has been submitted to the Illinois EPA, as provided in 35 IAC 220.280(d);

iii. The collection and control system has been operating a minimum of 15 years;

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 35 IAC 220.260(b). The test dates shall be no less than 90 days apart, and no more than 180 days apart; and

v. The system is not required to satisfy any applicable requirement of 35 IAC Subtitle G.

7.2.6 Emission Limitations

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

a. This permit is issued based upon the control system being used to control emissions of landfill gas including NMOC emissions.

7.2.7 Testing Requirements

a. After the installation of a collection and control system in compliance with 35 IAC 220.220 and 220.230,

the Permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in 35 IAC 220.250(h), using the equation provided in 35 IAC 220.260(b).

b. Pursuant to 35 IAC 220.210(d)(2) within 6 months of initial startup or upon change in method of compliance, or by October 31, 2001, whichever is later, the Permittee must certify compliance with the requirement of 35 IAC Part 220 by submitting to the Illinois EPA the following:

   i. A description of the gas collection and control system used;

   ii. The date the system was installed; and

   iii. A demonstration that the control system meets the requirements of 35 IAC 220.230:

      A. For active collection systems: the reduction efficiency or ppmv must be established by a performance test using test methods required pursuant to 35 IAC 220.260(d).

      B. For open flare: compliance with requirement of 40 CFR 60.18, incorporated by reference in 35 IAC 220.130 must be established.

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

d. Unless otherwise specified, each test shall consist of three separate runs each of at least sixty (60) minutes in duration. For the purpose of determining, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA approval, be determined using the arithmetic mean of the results of the two other runs.

e. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 60, Appendix A.

Sample and Velocity Traverses	USEPA Method 1
Determination of Stack Gas Velocity and Volumetric Flow Rate	USEPA Methods 2, 2A, 2C, or 2D
Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight	USEPA Method 3
Moisture Content in Stack Gases	USEPA Method 4
Visual Determination of Opacity	USEPA Method 9
Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 18 or 25
Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares	USEPA Method 22
Standard Method for Analysis of Reformed Gas by Gas Chromatography	ASTM D1946-77
Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter [High-Precision Method]	ASTM D2382-76

f. At least 30 days prior to the actual date of testing a written test plan shall be submitted to the Illinois EPA for review and approval, unless another procedure is approved by the Illinois EPA. This plan shall describe the specific procedures for testing, including:

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

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

iii. 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;

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

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

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

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

g. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification for the expected date of testing shall be submitted a minimum of thirty (30) days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five (5) working days prior to the actual test date.

h. Copies of the Final Report(s) for these tests shall be submitted to the Illinois EPA within 30 days after the test results are compiled and finalized. The Final Report shall include as a minimum:

i. A summary of results.

ii. General information.

iii. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule

iv. Detailed description of test conditions, including:

A. Total flow of landfill gas to the facility;

B. Landfill gas pretreatment operating parameters; and

C. Control system operating parameters, i.e., landfill gas flow to the control system, average flare combustion temperature, etc.

v. Data and calculations, including copies of all raw data sheets and records of laboratory analysis, sample calculations, and data on equipment calibration.

vi. The results of all quality control evaluations, including a copy of all quality control data.

i. The Permittee shall sample and analyze the landfill gas entering the control system(s) at least twice per year. This analyses shall include determinations for the following: heat value; methane 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

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:

i. Measure the gauge pressure in the gas collection header on a monthly basis, as provided in 35 IAC 220.240(a)(3); and

ii. Monitor the temperature and nitrogen or oxygen concentration in the landfill gas on a monthly basis, as provided in 35 IAC 220.240(a)(5).

b. Enclosed combustors. Each owner or operator of an enclosed combustors shall calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:

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, r plus or minus 0.5 degrees Celsius, whichever is greater.

ii. A device that records flow to or bypass of the control device. The owner or operator shall either:

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

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.

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:

i. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flare itself to indicate the continuous presence of a flame.

ii. A device that records flow to or bypass of the flare. The owner or operator shall either:

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

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.

d. Each owner or operator shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 35 IAC 220.240(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.

7.2.9 Recordkeeping Requirements

Permittee shall keep for at least 5 years, unless another time period is specified in this permit, 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.

b. For the life of the control equipment, the data listed in Conditions 7.2.9(b)(i) and (b)(ii) of this permit as measured during the initial performance test or compliance determination. Records of the control device vendor specifications shall be maintained until removal.

i. Active collection systems:

A. The maximum expected gas generation flow rate as calculated in 35 IAC 220.240(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.

B. The density of wells, horizontal collectors, surface collectors, or other gas extraction devices determined using the procedures specified in 35 IAC 220.220(b)(1)(A).

ii. Enclosed Combustion device other than boiler or process heater with a design heat input capacity greater 44 MW:

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

B. The percent reduction of NMOC determined as specified in 35 IAC 220.230(b) achieved by the control device.

iii. Open flare: the flare type (i.e., steam-assisted, air-assisted, or non-assisted), 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. Continuous records of the flare pilot flame or flare flame monitoring and records of operations during which the flare pilot flame or the flare flame is absent.

c. Continuous records of the equipment operating parameters specified to be monitored in 35 IAC 220.270 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.

i. 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 35 IAC 220.270.

ii. The following constitute exceedances that shall be recorded and reported for enclosed combustors, except for boilers and process heaters with design heat input of 44MW (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 35 IAC 220.230(b) was determined.

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:

i. The location of all newly installed collectors as specified under 35 IAC 220.240(b).

ii. The nature, date of deposition, amount, and location of asbestos-containing or nondegradable waste excluded from collection, as provided in 35 IAC 220.220(b)(1)(D)(i), as well as any nonproductive areas excluded from

collection, as provided in 35 IAC 220.220(b)(1)(D)(ii).

e. All collection and control system exceedances of the operational standards in Condition 7.2.5, the reading the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

7.2.10 Reporting Requirements

a. The Permittee shall promptly notify the Illinois EPA - Compliance Section of non-compliance with the operating requirements and emissions limitations of this permit. This shall include:

i. Notification within 60 days of operation of a control system that may not have been in compliance with the limitations of Special Condition 7.2.3, as determined from the records required by this permit, with a copy of such record for each incident;

ii. If there is any other exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA within 30 days after the exceedance. The report shall include the emissions released in accordance with recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or violation and efforts to reduce emissions and future occurrences.

b. Each owner or operator of a controlled landfill shall submit the information required by this Condition 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 35 IAC 220.250(h) of this Subpart have been met.

i. Certification that the operation of the collection and control system is no longer required pursuant to 35 IAC, Subtitle G;

ii. Documentation demonstrating that the 15-year minimum control period has expired; and

iii. Dated copies of the 3 successive NMOC emission rate reports, as provided for in Section 220.250(h) of this Subpart, demonstrating that

the landfill is no longer producing 50 Mg/yr or greater of NMOC, pursuant to Section 220.260(b) of this Section.

c. Each owner or operator of a landfill shall submit to the Illinois EPA annual reports of the recorded information in this Condition. 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 35 IAC 220.210(d)(2). For enclosed combustion devices and flares, reportable exceedances are defined under 35 IAC 220.290(c).

i. Value and length of time for exceedance of applicable parameters monitored under 35 IAC 220.270(a), (b), (c), and (d).

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 35 IAC 220.270.

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.

iv. All periods when the collection system was not operating in excess of 5 days.

v. The location of each exceedance of the 500 ppm methane concentration, as provided in 35 IAC 220.250(d), and the concentration recorded at each location for which an exceedance was recorded in the previous month.

vi. The date of installation and the location of each well or collection system expansion added pursuant to 35 IAC 220.240(a)(3), (b), and (c)(4).

d. Each owner or operator shall include the following information with the initial performance test report and any subsequent performance tests required pursuant to 35 IAC 220.210(d)(2).

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;

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;

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;

iv. The sum of gas generation flow rates for all areas from which collection wells have been excluded based on nonproductivity and the calculations of gas generation flow rate for each excluded area;

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

vi. The provisions for the control of off-site migration of gas.

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

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

a. The Permittee shall comply with the following methods determine whether the gas collection system is in compliance with 35 IAC 220.220.

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 35 IAC 220.260(a)(4), 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.

A. 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 35 IAC (a)(1)(A) and (a)(1)(B).

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 35 IAC 220.220 through 220.250.

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 exceedance within 5 calendar days, except for the three conditions allowed under 35 IAC 220.250(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 exceedance 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 exceedance may be submitted to the Illinois EPA for approval.

iv. 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 35 IAC 220.250(c). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15

calendar days after the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days after the initial exceedance. An alternate timeline for correcting the exceedance may be submitted to the Illinois EPA for approval.

b. The following procedures shall be used for compliance with the surface methane operational standard as provided in 35 IAC 220.250(d):

i. The Permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30-meter intervals (or 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 7.2.12(c).

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.

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.

iv. Any reading of 500 ppm or more above background at any location shall be recorded as a monitored exceedance and the following actions shall be taken. As long as the actions specified below are taken, the exceedance is not a violation of the operational requirements of Section 220.250(d) of this Subpart.

A. The location of each monitored exceedance shall be marked and the location recorded.

B. Cover maintenance or adjustments to the vacuum of the adjacent wells to increase the gas collection in the vicinity of each exceedance shall be made and the location shall be remonitored within 10

calendar days after detecting the exceedance. The 10 calendar days time period will automatically be extended for additional 15 days upon written request by the Permittee. The Illinois EPA may provide additional time for remonitoring upon written request by the Permittee.

C. If the remonitoring of the location shows a second exceedance, additional corrective action shall be taken and the location shall be monitored again within 10 days after the second exceedance. If the remonitoring shows a third exceedance for the same location, the action specified in Condition 7.2.12(b)(iv)(D) shall be taken. No further monitoring of that location is required until the action specified 7.2.12(b)(iv)(D) in has been taken.

D. If the remonitoring of the location does not show an exceedance, as specified by Condition 7.2.12(b)(iv)(B) or (b)(iv)(C), the location shall be remonitored 1 month from the initial exceedance. 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 exceedance, the actions specified in Condition 7.2.12(b)(iv)(C) or (b)(iv)(E), as appropriate, shall be taken.

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 exceedance. An alternate remedy to the exceedance, such as upgrading the blower, header pipes, or control device, and a corresponding timeline for installation may be submitted to the Illinois EPA for approval.

v. The owner or operator shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis.

c. The following instrumentation specifications and procedures for surface emission monitoring devices apply to the monitoring required by Condition 7.2.12(b):

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.

ii. The calibration gas shall be methane, diluted to a nominal concentration of 500 ppm in air.

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.

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.

d. The MSW landfill owners or operators are required to comply with the provisions of 35 IAC 220.240 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.

7.1.13 Compliance Schedules

a. The Illinois EPA has determined that the MSW Landfill is not in compliance with the requirements of 35 IAC 220. Therefore, the permit shield in Section 8.1 does not shield the Permittee from possible enforcement actions initiated by either USEPA or the Illinois EPA involving the above named emission units or activities. The Permittee shall, if needed, apply for revision of this permit to address the resolution of any such outstanding issue (e.g., include a new compliance schedule, identify appropriate applicable requirements and establish new requirements).

b. The Permittee shall comply with the following schedule of compliance to address compliance with the alleged violations of 35 IAC 220.210(d):

Milestone	Timing
Installation of six (6) exterior gas-monitoring probes.	No later than 90 days from the date issued of this permit
Regrading and installation of additional drainage features and erosion control devices (i.e., sedimentation basins) to accommodate surface water drainage from Area I.	No later than 270 days from the date issued of this permit.
Construction of new Cell 1 of Area II of Sangamon Valley Landfill.	No later than 270 days from the date issued of this permit.
Begin waste relocation activities from Area I after obtaining authorization from the IEPA BOL to place waste in Cell 1 of Area II. At this time the current gas collection system in the affected area would be removed.	No later than 360 days from the date issued of this permit.
Final cover will be placed after completing waste relocation activities. After installing the geomembrane liner and placement of soil on the line, the remaining gas collection lines will be re-installed.	No later than 720 days from the date issued of this permit.

c. Submittal of Progress Reports

A Progress Report shall be submitted every six months, beginning six months from the date of issuance of this permit and ending upon the achievement of compliance. The Progress Report shall contain at least the following:

i. The required timeframe for achieving the milestones in the schedule for compliance, and actual dates when such milestones were achieved.

ii. An explanation of why any required timeframe in the schedule of compliance was not met, and any preventive or corrective measures adopted.

d. The Permittee shall submit a written notification to the Illinois EPA Compliance Section within 15 days of coming into full compliance with 35 IAC 220.

e. The current gas collection system shall be operated up until the time at which removal of waste is to begin. The remaining gas collection system shall be operated to the best of its ability to minimize the emissions of landfill gas. The Permittee shall take interim measures to achieve compliance by continued calibration of the existing wells and performing the required gas collection system monitoring and reporting requirements of 35 IAC 220.

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after September 18, 2002 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

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

8.3 Emissions Trading Programs

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

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

8.4 Operational Flexibility/Anticipated Operating Scenarios

8.4.1 Changes Specifically Addressed by Permit

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

8.4.2 Changes Requiring Prior Notification

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

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

a. The changes do not violate applicable requirements;

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

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

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

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

   i. Describe the physical or operational change;

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

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

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

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

8.5 Testing Procedures

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

8.6 Reporting Requirements

8.6.1 Monitoring Reports

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

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

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

8.6.2 Test Notifications

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

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

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

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

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

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

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

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

8.6.3 Test Reports

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

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

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

c. The date any analyses were performed;

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

e. The test and analytical methodologies used;

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

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

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

8.6.4 Reporting Addresses

a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:

i. Illinois EPA - Air Compliance Section

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

ii. Illinois EPA - Air Regional Field Office

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

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

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

iv. USEPA Region 5 - Air Branch

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

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

8.7 Obligation to Comply with Title I Requirements

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

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

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

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

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

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

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

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

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

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

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

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

9.2.2 Duty to Maintain Equipment

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

9.2.3 Duty to Cease Operation

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

9.2.4 Disposal Operations

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

9.2.5 Duty to Pay Fees

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

9.3 Obligation to Allow Illinois EPA Surveillance

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

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

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

c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

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

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

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

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

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

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

9.4 Obligation to Comply With Other Requirements

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

9.5 Liability

9.5.1 Title

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

9.5.2 Liability of Permittee

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

9.5.3 Structural Stability

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

9.5.4 Illinois EPA Liability

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

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

9.5.5 Property Rights

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

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

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

9.6.2 Records of Changes in Operation

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

9.6.3 Retention of Records

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

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

9.7 Annual Emissions Report

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

9.8 Requirements for Compliance Certification

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

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

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

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

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

9.9 Certification

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

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

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

9.10.2 Emergency Provision

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

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

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

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

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

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

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

9.11 Permanent Shutdown

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

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

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

9.12.2 Reopening and Revision

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

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

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

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

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

9.12.3 Inaccurate Application

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

9.12.4 Duty to Provide Information

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

9.13 Severability Clause

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

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

9.14 Permit Expiration and Renewal

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

10.0 ATTACHMENTS

10.1 Attachment 1 - Summary of Emission Units

Emission Unit	Description	Date Constructed	Emission Control Equipment
MSW Landfill	Closed MSW Landfill	August 1980	Engines*

* Engines are owned and operated by Resource Technology Corporation I.D. No. 167120AMV

Emission Unit	Description	Date Constructed	Emission Control Equipment
Engine/ Generator 1	Caterpillar 399TA reciprocating engine used to generate electricity*	January 1997	None
Engine/ Generator 2	Caterpillar 399TA reciprocating engine used to generate electricity*	January 1997	None
Engine/ Generator 3	Caterpillar 399TA reciprocating engine used to generate electricity*	January 1997	None
Engine/ Generator 4	Caterpillar 399TA reciprocating engine used to generate electricity*	January 1997	None
Engine/ Generator 5	Caterpillar 399TA reciprocating engine used to generate electricity*	January 1997	None

* Landfill gas utilized in the above emission units is generated by Sangamon Valley Landfill I.D. No. 167822ABJ.

10.2 Attachment 2 - Example Certification by a Responsible Official

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

Signature: _____

Name: _____

Official Title: _____

Telephone No.: _____

Date Signed: _____

10.3 Attachment 3 - Guidance on Revising This Permit

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

1. Administrative Permit Amendment;

2. Minor Permit Modification; and

3. Significant Permit Modification.

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

1. Administrative Permit Amendment

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

2. Minor Permit Modification

- Do not violate any applicable requirement;

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

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

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

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

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

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

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

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

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

- The source’s suggested draft permit/conditions;

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

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

3. <u>Significant Permit Modification</u>

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Source Information

1. Source name:		
2. Source street address:		
3. City:		4. Zip code:
5. Is the source located within city limits?		☐ Yes ☐ No
6. Township name:	7. County:	8. I.D. number:

Owner Information

9. Name:		
10. Address:		
11. City:	12. State:	13. Zip code:

Operator Information (if different from owner)

14. Name		
15. Address:		
16. City:	17. State:	18. Zip code:

Applicant Information

19. Who is the applicant? ☐ Owner ☐ Operator	20. All correspondence to: (check one) ☐ Owner ☐ Operator ☐ Source
21. Attention name and/or title for written correspondence:	
22. Technical contact person for application:	23. Contact person's telephone number:

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

Summary Of Application Contents

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

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

Signature Block

This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.

30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.

Authorized Signature:

BY:

_____	_____
AUTHORIZED SIGNATURE	TITLE OF SIGNATORY
_____	_____ / _____ / _____
TYPED OR PRINTED NAME OF SIGNATORY	DATE

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source’s CAAPP permit, if necessary.

10.5 Attachment 5 - Guidance on Renewing This Permit

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Mail renewal applications to:

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

MVH:psj