217/782-2113

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

PERMITTEE

Upper Rock Energy Partners, L.L.C.
Attn: Dominic Antignano
40 Tower Lane
Avon, Connecticut 06001

Application No.: 01030027 I.D. No.: 161025ABZ
Applicant's Designation: Date Received: March 9, 2001
Operation of: Municipal Solid Waste Landfill Gas Combustion Processes
Date Issued: July 31, 2002 Expiration Date[2]: July 31, 2007
Source Location: 17201 20th Avenue, North, East Moline, Rock Island
Responsible Official: Dominic Antignano, Manager of Regulatory Compliance

This permit is hereby granted to the above-designated Permittee to OPERATE a municipal solid waste landfill gas combustion processes, 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 Davidson at 217/782-2113.

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

DES:MED:psj

cc: Illinois EPA, FOS, Region 1
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

Upper Rock Energy Partners, L.L.C.
17201 20th Avenue, North
East Moline, Illinois 61244
309/496-1213

I.D. No.: 161025ABZ
Standard Industrial Classification: 4911, Electric Services

1.2 Owner/Parent Company

Upper Rock Energy Partners, L.L.C.
40 Tower Lane
Avon, Connecticut 06001

1.3 Operator

Illinois Electrical Generation Partners, L.L.C.
1420 Church Street, Unit D
Bohemia, New York 11716

Dominic Antignano, Manager of Regulatory Compliance
631/563-6336

1.4 General Source Description

The Upper Rock Energy Partners, L.L.C. is located at 17201 20th Avenue, North near East Moline. The source utilizes landfill gas for the production of electricity. The plant is also used to control landfill gas emissions. The Upper Rock Island County Landfill supplies landfill gas to the landfill gas to energy plant. The landfill is owned and operated by Upper Rock Island County Landfill, Inc. (I.D. #161025ABU). Upper Rock Energy Partners (ID #161025ABZ), is a separate corporate entity, which has contracted with the Upper Rock Island County Landfill, Inc. to use the gas generated from the landfill in its landfill gas to energy facility. The landfill gas collection system, flare and engines are owned and operated by Upper Rock Energy Partners, L.L.C.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
ACMA	Alternative Compliance Market Account
Agency	Illinois EPA
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
bhp	Brake Horsepower
Btu	British thermal unit
Btu/scf	British thermal unit per standard cubic feet
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstract Service
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CFR	Code of Federal Regulations
dscf	dry standard cubic feet
ERMS	Emissions Reduction Market System
ft^3	Cubic Feet
gal	Gallon
g/bhp-hr	grams per braking horsepower hour
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
MWe	Megawatts electricity
mmBtu	Million British Thermal Units
mmBtu/hr	Million British Thermal Units per hour
mmHg	Millimeters of Mercury
mmscf	Million standard cubic feet
NMOC	Nonmethane Organic Compound
Mo	Month
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards
psia	pounds per square inch absolute

PM	Particulate Matter
PM_{10}	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
ppmv	parts per million volume
PSD	Prevention of Significant Deterioration
RMP	Risk Management Plan
scf	standard cubic feet
scfm	standard cubic feet per minute
scm	standard cubic meters
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
ZAPCO	Zahren Alternative Power Corporation

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:

Coolant Storage Tank
Waste Crank Oil Storage Tanks

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

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

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

3.2 Compliance with Applicable Requirements

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

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

3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate

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

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

3.3 Addition of Insignificant Activities

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

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

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

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
Active Gas Collection System	Active Gas Collection System Used to Route Landfill Gas to Engines and/or Open flare*	April 1998	Engines and/or Flare
Electrical Generation Facility	Landfill Gas Fired Internal Combustion Engine and Electrical Generator Sets* (See Attachment 10.1)	January 2000	None
Open flare	Open flare Used to Burn Landfill Gas*	June 1998	None

* Landfill gas utilized in the above emission units is generated by Upper Rock Island County Landfill, Inc. I.D. #161025ABU. See CAAPP Permit No. 98090034)

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

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

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

5.1.3 For purposes of the CAAPP, Upper Rock Energy Partners, L.L.C. is considered a single source with Upper Rock Island County Landfill, Inc. (I.D. #161025ABU), Permit 98090034, located at 17201 - 20th Avenue, North East Moline. The source has elected to obtain separate CAAPP permits for these locations.

It should be noted that Upper Rock Energy Partners, L.L.C. is a separate entity, which has contracted with the with Upper Rock Island County Landfill, Inc. to use the gas generated from the landfill in its landfill gas to energy source. The landfill gas collection system, flare and engines are owned and operated by Upper Rock Energy Partners, L.L.C.

5.2 Applicable Regulations

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

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

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

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

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.

c. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 1 (250 gal), unless such tank is equipped with a permanent submerged loading pipe, submerged fill or an equivalent device approved by the Illinois EPA. [35 IAC 215.122(b]

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

Note: At the time of issuance of this permit, no volatile organic liquid was loaded at the source.

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

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.

5.2.6 Episode Action Plan

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

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

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

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

i. Illinois EPA, Compliance Section; and

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

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

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

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

None

5.5 Source-Wide Emission Limitations

5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations.

The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	19.91
Sulfur Dioxide (SO_2)	3.96
Particulate Matter (PM)	11.87
Nitrogen Oxides (NO_x)	116.58
HAP, not included in VOM or PM	5.76
Total	158.08

5.5.2 Emissions of Hazardous Air Pollutants

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

5.5.3 Other Source-Wide Emission Limitations

The Permittee shall comply with the following source wide limits:

a. This permit is issued based on the total emissions from the source, i.e., the adjacent landfill (Upper Rock Island County Landfill, Inc. (ID #161025ABU)) and the landfill gas cogeneration/control facility (Upper Rock Energy Partners, L.L.C. (ID #161025ABZ), not exceeding the following limitations:

Pollutants	NO_x	CO
(Tons/Yr)	225.0	225.0

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]

The limits on carbon monoxide and nitrogen oxides are limitations established in Permit 00050008 (ID No. 161025ABZ), 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].

b. The above limits are established based upon the MSW landfill's emissions being controlled as described in Section 7.0.

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 and 5.5.3, pursuant to Section 39.5(7)(b) of the Act:

a. Monthly determination of compliance with Condition 5.5.3 based upon the procedure in 5.9.

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

5.6.2 Records for Operating Scenarios

N/A

5.6.3 Retention and Availability of Records

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

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

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the

probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

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

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating 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 Active Gas Collection System

7.1.1 Description

Active gas collection system used to collect landfill gas. The landfill gas is then routed to either the electrical generation facility (Section 7.2) and/or LFG flare station (Section 7.3).

Landfill gas utilized in the active gas collection is generated by Upper Rock Island County Landfill, Inc. (I.D. #161025ABU).

7.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Active Gas Collection System	Active gas collection system used to route landfill gas to Electrical Generation Facility (Section 7.2) and/or LFG Flare Station (Section 7.3)*	Electrical Generation Facility (Section 7.2) and/or LFG Flare Station (Section 7.3)

* Landfill gas utilized in the above emission units is generated by Upper Rock Island County Landfill, Inc. (I.D. #161025ABU).

7.1.3 Applicability Provisions and Applicable Regulations

a. The “affected emission unit” for the purpose of these unit-specific conditions, is the active gas collection system described in Conditions 7.1.1 and 7.1.2.

b. The affected emission unit is subject to the emission limits and requirements identified in Section 5 of this Permit.

c. The affected emission unit is subject to the New Source Performance Standard (NSPS) for air emissions from Municipal Solid Waste Landfills, 40 CFR 60 WWW, because it is an active gas collection system for the Upper Rock Island County Landfill, Inc. a subsidiary of Allied Waste Industries, (I.D. #161025ABU). (See Condition 5.1.3) Illinois EPA is administrating NSPS in Illinois on behalf of the United States EPA under a delegation agreement and through Section 9.1 of the Illinois Environmental Protection Act.

At all times, the Permittee shall maintain and operate the affected emission unit, including air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

At the time of issuance of this permit the design capacity of the landfill is equal to or greater than 2.5 million megagrams and 2.5 million cubic meters and the calculated NMOC emission rate is less than 50 megagrams per year based upon a Tier 2 analysis (See 40 CFR 60.754(a)(3)). Based upon the results of this analysis, the Permittee is not required to comply with the NSPS landfill gas collection and control requirements referenced in Conditions 7.1.5, 7.1.8(a), 7.1.9(a), 7.1.10(b) and 7.1.12.

7.1.4 Non-Applicability of Regulations of Concern

None

7.1.5 Operational Production Limits and Work Practices

a. If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the Permittee shall comply with the requirements of 40 CFR 60.752(b)(2). These requirements include but are not limited to the following:

i. Routing of all collected landfill gas to a control system that complies with the requirements in either paragraph 40 CFR 60.752(b)(2)(iii)(A), (B) or (C). [40 CFR 60.752(b)(2)(iii)]

ii. Operation of the collection and control device installed to comply with 40 CFR 60 Subpart WWW in accordance with the provisions of 40 CFR 60.753, 60.755 and 60.756. [40 CFR 60.752(b)(2)(iv)]

As referenced in Condition 7.1.3(c), at the time of issuance of this permit the calculated NMOC emissions are from the associated landfill does not exceed 50 megagrams per year based upon the Tier 2 analysis.

b. Upon installation of a gas collection and control system used to comply with the provisions of 40 CFR 60.752(b)(2)(ii) (Condition 7.1.5(a)(ii)), the Permittee shall operate the collection system in accordance with the provisions of 40 CFR 60.753 (Below).

i. Operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for: [40 CFR 60.753(a)]

   A. 5 years or more if active; or [40 CFR 60.753(a)(1)]

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

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

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

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

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

iii. Operate each interior wellhead in the collection system with a landfill gas temperature less than 55 ºC and with either a nitrogen level less than 20 percent or an oxygen level less than 5 percent. The Permittee may establish a higher operating temperature, nitrogen, or oxygen value at a particular well. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens. Nitrogen or oxygen levels shall be determined based upon the applicable methods and or procedures shown in 40 CFR 60.753(c)(1) or (2). (Below) [40 CFR 60.753(c)]

   A. The nitrogen level shall be determined using Method 3C, unless an alternative

test method is established as allowed by 40 CFR 60.752(b)(2)(i) (Condition 7.1.5(a)(i)). [40 CFR 60.753(c)(1)]

B. Unless an alternative test method is established as allowed by 40 CFR 60.752(b)(2)(i) (Condition 7.1.5(a)(i)), the oxygen shall be determined by an oxygen meter using Method 3A or 3C except that: [40 CFR 60.753(c)(2)]

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

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

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

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

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

iv. Operate the system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.752(b)(2)(iii) (Condition 7.1.5(a). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within 1 hour; [40 CFR 60.753(e)] and

v. Operate the control at all times when the collected gas is routed to the system. [40 CFR 60.753(f)]

vi. If monitoring demonstrates that the operational requirements in 40 CFR 60.753(b), (c) or (d) (Condition 7.1.5(b)(ii), (iii) or (iv)) are not met, corrective action shall be taken as specified in 40 CFR 60.755(a)(3) through (5) (Condition 7.1.12(a)(ii), (iii)

and (iv)) or 40 CFR 60.755(c) (Condition 7.1.8(a)). If corrective actions are taken as specified in 40 CFR 60.755 (Condition 7.1.12(a)), the monitored exceedance is not a violation of the operational requirements in 40 CFR 60.753 (Condition 7.1.5(b)). [40 CFR 60.753(g)]

c. Not withstanding the above, the Permittee shall operate the gas collection system 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 control or treatment system at all times when the collected gas is routed to the system(s).

7.1.6 Emission Limitations

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

N/A

7.1.7 Testing Requirements

None

7.1.8 Inspection and Monitoring Requirements

a. Upon being subject to the control requirements of 40 CFR 60 Subpart WWW, the Permittee shall comply with the following as applicable:

i. The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR 60.753(d) (Condition 7.1.5(b)(iv)). [40 CFR 60.755(c)]

A. After installation of the collection system, the Permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis

using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.755(d) (Condition 7.1.8(a)(ii)) (Below). [40 CFR 60.755(c)(1)]

B. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. [40 CFR 60.755(c)(2)]

C. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of Appendix A of 40 CFR Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. [40 CFR 60.755(c)(3)]

D. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(4)(i) through (v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d). [40 CFR 60.755(c)(4)]

E. The Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. [40 CFR 60.755(c)(5)]

ii. Each Permittee seeking to comply with the provisions in 40 CFR 60.755(c) (Condition 7.1.8(a)) shall comply with the instrumentation specifications and procedures for surface emission monitoring devices in 40 CFR 60.755(d) (See below). [40 CFR 60.755(d)]

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

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

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

D. The calibration procedures provided in section 4.2 of Method 21 of appendix A of this part shall be followed immediately before commencing a surface monitoring survey. [40 CFR 60.755(d)(4)]

iii. The gas collection and control requirements of 40 CFR 60 Subpart WWW shall apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices. [40 CFR 60.755(e)]

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

A. Each Permittee seeking to comply with 40 CFR 60.752(b)(2)(ii)(A) for an active gas collection system shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead and: [40 CFR 60.756(a)]

1. Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60.755(a)(3) (Condition 7.1.12(c)(ii)); and [40 CFR 60.756(a)(1)]

2. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5) (Condition 7.1.12(c)(iv)); and [40 CFR 60.756(a)(2)]

3. Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5) (Condition 7.1.12(c)(iv)). [40 CFR 60.756(a)(3)]

B. Each Permittee seeking to comply with 40 CFR 60.752(b)(2)(iii) (Condition 7.1.5(a)(i)) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment. [40 CFR 60.756(b)]

1. A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ±1 percent of the temperature being measured expressed in degrees Celsius or ±0.5 degrees Celsius, whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts. [40 CFR 60.756(b)(1)]

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

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

II. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line. [40 CFR 60.756(b)(2)(ii)]

C. If the Permittee seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) (Condition 7.1.5(a)(i)) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment: [40 CFR 60.756(c)]

1. A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame. [40 CFR 60.756(c)(1)]

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

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

II. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line. [40 CFR 60.756(c)(2)(ii)]

D. If the Permittee seeks to demonstrate compliance with 40 CFR 60.752(b)(2)(iii) (Condition 7.1.5(a)(i)) using a device other than an open flare or an enclosed combustor, the Permittee shall provide information satisfactory to the Illinois EPA or USEPA as provided in 40 CFR 60.752(b)(2)(i)(B) describing the operation of the control device, the operating parameters that would indicate proper performance, and appropriate

monitoring procedures. The Illinois EPA or USEPA shall review the information and either approve it, or request that additional information be submitted. The Illinois EPA or USEPA may specify additional appropriate monitoring procedures. [40 CFR 60.756(d)]

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

F. If the Permittee seeks to demonstrate compliance with 40 CFR 60.755(c) (Condition 7.1.8(a)(i)), the Permittee shall monitor surface concentrations of methane according to the instrument specifications and procedures provided in 40 CFR 60.755(d) (Condition 7.1.8(a)(ii)). Any closed landfill that has no monitored exceedances of the operational standard in three consecutive quarterly monitoring periods may skip to annual monitoring. Any methane reading of 500 ppm or more above background detected during the annual monitoring returns the frequency for that landfill to quarterly monitoring. [40 CFR 60.756(f)]

b. The Permittee is required to perform quarterly inspections of the gas collection system in order to ensure that the system is operating in a manner consistent with good air pollution control practices. These inspections maybe conducted concurrently with regular inspection, repair and maintenance activities for the gas collection and control systems.

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 collection system to demonstrate compliance with Conditions 5.5.1, 7.1.3, 7.1.5, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

a. The Permittee shall fulfill the recordkeeping requirements pursuant to NSPS 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills:

i. Except as provided in 40 CFR 60.752(b)(2)(i)(B), if the MSW landfill becomes subject to the control requirements under 60.752(b)(2)(ii), the Permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data listed in 40 CFR 60.758(b)(1) through (b)(4) (See below) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the control device vendor specifications shall be maintained until removal. [40 CFR 60.758(b)]

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

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

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

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

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

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

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

iii. Except as provided in 40 CFR 60.752(b)(2)(i)(B), if the MSW landfill becomes subject to the control requirements under 40 CFR 60 Subpart WWW, the Permittee shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. [40 CFR 60.758(c)]

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

1. For enclosed combustors except for boilers and process heaters with design heat input capacity of 44

megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28 °C below the average combustion temperature during the most recent performance test at which compliance with 40 CFR 60.752(b)(2)(iii) was determined. [40 CFR 60.758(c)(1)(i)]

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

B. If the MSW landfill becomes subject to the control requirements under 40 CFR 60 Subpart WWW, the Permittee shall keep up-to-date, readily accessible continuous records of the indication of flow to the control device or the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756. [40 CFR 60.758(c)(2)]

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

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

the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent. [40 CFR 60.758(c)(4)]

iv. Except as provided in 40 CFR 60.752(b)(2)(i)(B), if the MSW landfill becomes subject to the control requirements under 40 CFR 60 Subpart WWW, the Permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. These shall include: [40 CFR 60.758(d)]

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

v. Except as provided in 40 CFR 60.752(b)(2)(i)(B), if the MSW landfill becomes subject to the control requirements under 40 CFR 60 Subpart WWW, the Permittee shall keep for at least 5 years up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 40 CFR 60.753, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance. [40 CFR 60.758(e)]

b. General Records

Not withstanding the above, the Permittee shall maintain and retain the following general records:

i. Copies of any additional landfill gas analyses that may be conducted during the normal operation of the gas collection system;

ii. Copies of all data used to determine landfill gas flow to the gas collection system

iii. Copies of all records related to the gas collection system that are required under 35 IAC Subtitle G.

iv. Copies of maintenance and inspection logs for the gas collection system.

v. The Permittee shall keep for the life of the collection system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector. These shall include: Up-to-date, readily accessible records of the installation date and location of all newly installed collectors.

vi. Inspections:

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

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

C. The dates the corrective action were implemented; and

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

7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of an affected collection system 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 fulfill the reporting requirements pursuant to NSPS 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills:

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

A. If the Permittee elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in 40 CFR 60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year. [40 CFR 60.757(c)(1)]

B. If the Permittee elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in *Tier 3* in 40 CFR 60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission

rate report based on the provisions of 40 CFR 60.754(a)(4) (*Tier 3)* and the resulting site-specific methane generation rate constant (k) shall be submitted to the Illinois EPA, Division of Air Pollution Control within 1 year of the first calculated emission rate exceeding 50 megagrams per year. [40 CFR 60.757(c)(2)]

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

c. The Permittee is required to notify the Illinois EPA and the operator of the associated landfill (i.e., Upper Rock Island County Landfill, Inc. - I.D. #161025ABU) of any independent determinations of overall source (See Condition 5.1.3) non-compliance or changes in regulatory applicability.

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 collection system 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

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

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

ii. For the purpose of demonstrating whether the gas collection system flow rate is sufficient to determine compliance with 40 CFR 60.752(b)(2)(ii)(A)(3), the owner or operator shall measure gauge pressure in the gas collection header at each individual well, monthly. If a positive pressure exists, action shall be initiated to correct the exceedance within 5 calendar days, except for the three conditions allowed under 40 CFR 60.753(b) (Condition 7.1.5(b)(ii)). If negative pressure cannot be achieved without excess air infiltration within 15 calendar days of the first measurement, the gas collection system shall be expanded to correct the exceedance within 120 days of the initial measurement of positive pressure. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Illinois EPA and/or USEPA for approval. [40 CFR 60.755(a)(3)]

iii. Owners or operators are not required to expand the system as required in 40 CFR 60.755(a)(3) (Condition 7.1.12(a)(ii)) during the first 180 days after gas collection system startup. [40 CFR 60.755(a)(4)]

iv. For the purpose of identifying whether excess air infiltration into the landfill is occurring, the owner or operator shall monitor each well monthly for temperature and nitrogen or oxygen as provided in 40 CFR 60.753(c) (Condition 7.1.5(b)(iii)). If a well exceeds one of these operating parameters, action shall be initiated to correct the exceedance within 5 calendar days. If correction of the exceedance cannot be achieved within 15 calendar days of the first measurement, the gas collection system shall be expanded to

correct the exceedance within 120 days of the initial exceedance. Any attempted corrective measure shall not cause exceedances of other operational or performance standards. An alternative timeline for correcting the exceedance may be submitted to the Illinois EPA and/or USEPA for approval. [40 CFR 60.755(a)(5)]

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

b. For purposes of compliance with 40 CFR 60.753(a) (Condition 7.1.5(b)(i)), each owner or operator of a controlled landfill shall place each well or design component as specified in the approved design plan as provided in 40 CFR 60.752(b)(2)(i) (Condition 7.1.5(a)). Each well shall be installed no later than 60 days after the date on which the initial solid waste has been in place for a period of: [40 CFR 60.755(b)]

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

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

7.2 Electrical Generation Facility

7.2.1 Description

The electrical generation facility consist of three (3) 987-kilowatt (kW) Jenbacher Energie Systems landfill gas fired gensets, a genset consists of an electrical generator powered by an internal combustion engine. Each genset has a rated heat input of 8.82 mmBtu/hr and a power generation rating of 1,387 brake-horsepower.

7.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Engine/Generator 1	Landfill Fired Gas Internal Combustion Engine and Electricity Generation*	None
Engine/Generator 2	Landfill Fired Gas Internal Combustion Engine and Electricity Generation*	None
Engine/Generator 3	Landfill Fired Gas Internal Combustion Engine and Electricity Generation*	None

* Landfill gas utilized in the above emission units is generated by Upper Rock Island County Landfill, Inc. (I.D. #161025ABU).

7.2.3 Applicability Provisions and Applicable Regulations

a. The “affected emission units” for the purpose of these unit-specific conditions are the emission units described in Condition 7.2.1 and 7.2.2.

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

c. The source (See Condition 5.1.3) is subject to the New Source Performance Standard (NSPS) for air emissions from Municipal Solid Waste Landfills, 40 CFR 60, Subparts A and WWW. Illinois EPA is administrating NSPS in Illinois on behalf of the United States EPA under a delegation agreement and through Section 9.1 of the Illinois Environmental Protection Act.

i. For purposes of compliance with the NSPS, the affected emission units 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 emission units either alone or in combination with those emission units in Section 7.3, 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. [40 CFR 60.752(b)(2)(iii)(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 40 CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting off the gas to the atmosphere shall be closed within one hour; [40 CFR 60.753(e)] and

B. Operation of the control system at all times when the collected gas is routed to the system. [40 CFR 60.753(f)]

d. 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 emission unit at all times when the collected gas is routed to the system(s).

7.2.4 Non-Applicability of Regulations of Concern

a. 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).

b. 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).

7.2.5 Operational and Production Limits and Work Practices

None

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.3, the affected emission units are subject to the following:

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

b. i. Landfill gas, supplemented as needed with natural gas or other gaseous fuel, shall be the only fuels fired in the affected emission units.

ii. The combined fuel usage for the affected emission units shall not exceed the following limits.

Hourly Limit	Annual Limit
97,800 scf/hr	856.7 million scf/yr

Compliance with the annual limit shall be based upon a rolling average of 12 months of fuel usage and thermal loading for the affected emission units.

These limits are based on the maximum fuel usage for the facility and an assumed average thermal loading of 500 BTU/scf.

iii. The maximum braking horsepower of each affected emission unit shall not exceed 1,387 bhp.

c. Combined emissions of the affected emission units shall not exceed the following:

Pollutants	(Lb/Hr)	(Tons/Yr)
NO_x	25.5	111.8
SO_2	0.81	3.54
CO	45.9	200.9
PM	2.6	11.4
VOM	3.8	16.7

These limits are based on the maximum operating hours of 8,760 hr/yr, and test data as indicated in the application.

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].

The above limitations were established in Permit 00050008 issued to Upper Rock Energy Partners, L.L.C., 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].

7.2.7 Testing Requirements

a. For the performance test required in 40 CFR 60.752(b)(2)(iii)(B), Method 25, 25A, 25C or Method 18 of Appendix A of 40 CFR Part 60 (or any other Method approved by the Illinois EPA or USEPA) shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the USEPA or Illinois EPA as provided by 40 CFR 60.752(b)(2)(i)(B). If using Method 18 of Appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). The following equation shall be used to calculate efficiency: [40 CFR 60.754(d)]

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

Where:

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

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

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.

7.2.8 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).

7.2.9 Recordkeeping Requirements

a. The Permittee keep up-to-date, readily accessible records for the life of the control system of the data listed in 40 CFR 60.758(b)(2) as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 5 years. Records of the affected emission unit's manufactures specifications shall be maintained until removal. [35 IAC 201.281]

   i. Any operating parameters that are continuously monitored and recorded that are associated with proper operation of the affected emission units.

   ii. The NMOC reduction efficiency or parts per million by volume emission rate determined as specified in 40 CFR 60.752(b)(2)(iii)(B).

b. The Permittee shall keep records of the equipment operating parameters for the affected emission unit specified to be monitored in 40 CFR 60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. [35 IAC 201.281]

c. The Permittee shall keep records of any periods of operation during which any affected emission unit exceed the operating parameters preset by the affected emission unit's manufacture or those established by the most recent performance test at which compliance with 40 CFR 60.752(b)(2)(iii) was determined or permit limitations were established. These incidents shall also be reported under 40 CFR 60.757(f). [35 IAC 201.281]

d. The Permittee shall keep up-to-date records of the indication of flow to the control system or the monitoring conducted pursuant to Condition 7.2.8. This includes but is not limited to an indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756. [40 CFR 60.758(c)(2) and 35 IAC 201.281]

e. The Permittee shall keep records for each startup of an affected emission unit, that as a minimum, shall include:

i. Duration of the startup, i.e. start time and time startup discontinued or normal operation achieved, i.e., stable operation at load.

ii. The nature of opacity, i.e., severity and duration, during the startup and the nature of opacity at the conclusion of startup, if above normal.

iii. Whether exceedance of Conditions 5.2.2(b) or 7.2.3 may have occurred during startup, with explanation and estimated duration (minutes).

f. The Permittee shall maintain records of the following items for the control system in order to demonstrate compliance with Conditions 5.5, 7.2.5, and 7.2.6.

i. Annual landfill gas usage determined each month based on the current month of records usage plus the usage for the preceding 11 months.

ii. Total hours of operation per year for the control system (e.g., the total combined hours of operation of all the affected emission units) determined each month based on the current month of records hours of operation for the control system plus the hours of operation for the control system for the preceding 11 months.

iii. Total annual NOx, PM, SO2, CO, and VOM emissions from the affected emission units, based on the current month of records months landfill gas usage plus the usage for the preceding 11 and the applicable emission factors, with supporting calculations.

iv. A maintenance and repair log for each affected emission unit, listing each activity performed with date.

g. Records shall be retained for five years and shall be readily available for inspection and copying by the Illinois EPA upon request. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

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. Emissions of NO_x, PM, SO_2, CO, or VOM in excess of the limits in Condition 5.5 and 7.2.6, calculated by using emission factors and equation from Condition 7.2.12 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.

ii. Notification within 60 days of operation of an affected emission unit that may not have been in compliance with the opacity limitations of Condition 5.2.2, as determined from the records required by Condition 7.2.9(e), with a copy of such record for each incident.

iii. 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. The Permittee shall submit to the Illinois EPA annual reports of the following information. The initial annual report shall be submitted within 180 days of installation and start-up of the control system, and shall include the initial performance test report required under 40 CFR 60.8. Thereafter, these reports shall be submitted with the annual emissions report, as required under 35 IAC Part 254. [40 CFR 60.757(f)]

i. Description and duration of all periods when the gas stream is diverted from the control system through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756. [40 CFR 60.757(f)(2])

ii. Description and duration of all periods when the control system was not operating for a period exceeding 1 hour and length of time the control system was not operating. [40 CFR 60.757(f)(3)]

iii. Other reportable exceedances as shown in Condition 7.2.9(c) and (d) and defined under 40 CFR 60.758(c).

iv. Annual affected emission unit VOM, PM, CO, SO_2 and NO_x emissions, with calculations, based upon the compliance procedures in Condition 7.2.12.

v. If applicable, the annual NO_x, PM, SO_2, CO, and VOM emissions which exceeded the annual limitations in Conditions 5.5 and 7.2.6, if any.

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

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

None

7.2.12 Compliance Procedures

a. Compliance with the emission limits in Conditions 5.5 and 7.2.6 shall be based on the recordkeeping requirements in Condition 7.2.9 and calculated based on the emission factors developed from the emission testing performed on March 15, 2001 or the emission rates below, whichever is higher, and formulas listed below:

	Emission Rates per Affected Emission Unit	
Pollutant	(Lb/Hr)	Notes
PM/PM_{10}	0.52	1
NO_x	5.10	2
SO_2	0.16	3
VOM	0.76	4
CO	9.17	5

Notes:

1. PM emissions factor based upon the AP-42 (Table 2.4-5) emission factor (48 $lb/10^6$

dscf methane), a methane concentration of 55 percent, and a calculated maximum landfill gas flow rate (fuel consumption) (327 scfm) which is based upon a landfill gas lower heating value of 500 Btu/scf and the maximum manufactures rated heat input of 8.817 mmBtu/hr

2. NO_x emission factor provided by the affected emission unit's manufacturer guaranteed emission rate (1.67 g/bhp-hr) and the maximum braking horsepower of the engine (1387 bhp)

3. SO_2 emissions factor based upon the calculation procedures in AP-42 and the maximum landfill gas flow rate (fuel consumption) provided by the affected emission unit's manufacturer (327 scfm)

4. VOM emission factor provided by the affected emission unit's manufacturer guaranteed emission rate (0.25 g/bhp-hr) and the maximum braking horsepower of the engine (1387 bhp).

5. CO emission factor provided by the affected emission unit's manufacturer guaranteed emission rate (3.0 g/bhp-hr) and the maximum braking horsepower of the engine (1387 bhp)

Emissions (lb) = appropriate emission factor X total operating hours of the affected emission units

b. For the purpose of demonstrating compliance with the HAP limitations shown in Condition 5.5.2 and for estimating controlled methane, NMOC, and speciated emissions, emissions may be calculated based upon the monitoring, recordkeeping, and reporting requirements in Conditions 7.2.8, 7.2.9, and 7.2.10; the USEPA Landfill Gas Emissions Model (See http://www.epa.gov/ttn/chief and AP-42, Chapter 2.4) and the control equipment efficiencies shown in AP-42, Chapter 2.4. The Permittee is allowed to use site-specific NMOC concentration and/or methane generation rate constant (k) determined through the procedures shown 40 CFR 60.754(a). Further, the Permittee is allowed to use NMOC concentration, methane generation rate constant (k) and/or methane generation potential (Lo) approved by USEPA or Illinois EPA. In addition, the Permittee is allowed to use site specific HAP emissions data recorded during landfill gas testing provided that full documentation and emissions

calculations data is provided as part of the HAP emission report. It should be noted that approval must be made in writing for any changes made to standard USEPA methods.

7.3 LFG Flare Station

7.3.1 Description

The LFG flare station consists of an open flare, which is used to control methane and NMOC emissions collected by the landfill gas collection system described in Section 7.1. The flare acts as a backup for the engines described in Section 7.2. It burns landfill gas when the engines are shutdown for maintenance and repair and in other instances when the excess LFG requires control (i.e., landfill gas generation exceeds the fuel consumption capabilities of the engines described in Section 7.2).

Landfill gas utilized in the LFG flare station is generated by Upper Rock Island County Landfill, Inc. (I.D. #161025ABU).

7.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Open flare	Open flare Used to Burn Landfill Gas*	None

* Landfill gas utilized in the above emission units is generated by Upper Rock Island County Landfill, Inc. (I.D. #161025ABU).

7.3.3 Applicability Provisions and Applicable Regulations

a. The “affected emission unit” for the purpose of these unit-specific conditions, is the open flare described in Conditions 7.3.1 and 7.3.2.

b. The affected emission unit is subject to the emission limits and requirements identified in Section 5 of this Permit.

c. The affected emission unit is 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 unit to exceed 2,000 ppm [35 IAC 214.301].

d. The source (See Condition 5.1.3) is subject to the New Source Performance Standard (NSPS) for air emissions from Municipal Solid Waste Landfills, 40 CFR 60, Subparts A and WWW. Illinois EPA is administrating NSPS in Illinois on behalf of the United States EPA under a delegation agreement and through Section 9.1 of the Illinois Environmental Protection Act.

i. For purposes of compliance with the NSPS, the affected emission unit is 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 emission units either alone or in combination with those emission units in Section 7.2, 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. [40 CFR 60.752(b)(2)(iii)(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 40 CFR 60.752(b)(2)(iii). In the event the collection or control system is inoperable, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting off the gas to the atmosphere shall be closed within one hour; [40 CFR 60.753(e)] and

B. Operation of the control system at all times when the collected gas is routed to the system. [40 CFR 60.753(f)]

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

i. In the event the LFG collection or control system are 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.

ii. Operate the affected emission unit at all times when the collected gas is routed to the system.

7.3.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected flare not being subject to 40 CFR Part 64, Compliance Assurance

Monitoring (CAM) for Major Stationary Sources, because the affected is subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

7.3.5 Operational Limits and Work Practices

a. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.

b. Landfill gas, supplemented as needed with natural gas or other gaseous fuel, shall be the only fuels fired in the affected emission units. Supplemental fuel shall only be used as a means to increase the BTU content of the gasses burned in the affected emission unit pursuant to the minimum BTU content in Condition 7.3.5(c)(iii).

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

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

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

iii. The open flare shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR 60.18(f)(3). [40 CFR 60.18(c)(3)(ii)]

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

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

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

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

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

ix. The net heating value of the gas being combusted in the open flare(s) shall be calculated using the following equation: [40 CFR 60.18(f)(3)]

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

Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C;

K = Constant,

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

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

C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77

(Incorporated by reference as specified in §60.17); and

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

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

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

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

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

8.706 = Constant

0.7084 = Constant

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

7.3.6 Emission Limitations

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

Operating Hours = 8,760 hours/year

Pollutant	Lb/Hr	Ton/Yr
CO	50.3	220.3
NO_x	6.7	29.4
VOM	4.5	19.5

These limits are based on the maximum open flare emissions, maximum gas generation rate, maximum hours of operation indicated in the application, and standard emission calculation procedures. Compliance with these limits is based on the compliance procedures in Condition 7.3.12.

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].

The above limitations were established in Permit 96100057 issued to Upper Rock Energy Partners, L.L.C., 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].

7.3.7 Testing Requirements

a. 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 on these tests upon written request by the Permittee.

7.3.8 Monitoring Requirements

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

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

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

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).

7.3.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected emission unit to demonstrate compliance with Conditions 5.5.1, 5.5.3, 7.3.3, 7.3.5, and 7.3.6, pursuant to Section 39.5(7)(b) of the Act:

a. The Permittee shall maintain records of the following items to demonstrate compliance with Condition 7.3.6:

i. Monthly and annual landfill gas volumetric throughput through the affected emission unit;

ii. Landfill gas methane content and net heating heat content (Btu/cubic foot), flare gas exit velocity (m/sec or ft/sec), determined on at least an annual basis (See Condition 7.3.5(c));

iii. Up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under Condition 7.3.5(c), and all periods of operation in which the flame or flare pilot flame is absent;

iv. Operating hours of the landfill gas fired flare per month;

v. Records of all determinations required under Condition 7.3.5(c) and 7.3.8 and any ancillary testing or monitoring results complied by the Permittee; and

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

b. The Permittee shall maintain records of the following items for each exceedance of the limits in Conditions 7.3.3, 7.3.5, or 7.3.6, which 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.

7.3.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations of an affected flare 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 7.3.3, 7.3.5, or 7.3.6. 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 7.3.3, 7.3.5, or 7.3.6, if any, which required notification to the Compliance Section in accordance with Condition 7.3.10(a).

ii. The annual emissions of CO, SO_2 and NO_x from the affected flare for each month of the previous calendar year, to demonstrate compliance with Condition 7.3.6, tons/year (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).

7.3.11 Operational Flexibility/Anticipated Operating Scenarios

None

7.3.12 Compliance Procedures

a. Compliance with Conditions 7.3.3(c) (35 IAC 214.301) is assured as long as the Permittee meets the requirements of Condition 7.3.5.

b. For the purpose of demonstrating compliance with the HAP limitations shown in Condition 5.5.2 and for estimating controlled methane, NMOC, VOM (See Condition 7.3.6) and speciated emissions, emissions may be calculated based upon the monitoring, recordkeeping, and reporting requirements in Conditions 7.3.8, 7.3.9, and 7.3.10; the USEPA Landfill Gas Emissions Model (See http://www.epa.gov/ttn/chief and AP-42, Chapter 2.4) and the control equipment efficiencies shown in AP-42, Chapter 2.4. The Permittee is allowed to use site-specific NMOC concentration and/or methane generation rate constant (k) determined through the procedures shown 40 CFR 60.754(a). Further, the Permittee is allowed to use NMOC concentration, methane generation rate constant (k) and/or methane generation potential (Lo) approved by USEPA or Illinois EPA. In addition, the Permittee is allowed to use site specific HAP emissions data recorded during landfill gas testing provided that full documentation and emissions calculations data is provided as part of the HAP emission report. It should be noted that approval must be made in writing for any changes made to standard USEPA methods.

c. Flare Emissions shall be calculated based upon the following emission factors and landfill gas flow rate records:

CO, NO_x and PM/PM_{10}

Pollutant	Emission Factor	Derived From
CO	750 lb/10^6 dscf methane	1
NO_x	40 lb/10^6 dscf methane	1
PM/PM_{10}	17 lb/10^6 dscf methane	1

Notes

1 Emission factor based upon AP-42 Section 2.4 (Table 2.4-5.);

Flare Emissions (lb) = (Landfill Gas Vented to the Flare, dscfm) x (The Appropriate Emission Factor, lb/dscf methane)/1,000,000 x 60 minutes/hour x Landfill Gas Methane Concentration (Percent)/100%)

Landfill Gas Methane Concentration shall be based upon the determination required under Condition 7.3.9(a)(ii).

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 April 30, 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
Division of Air Pollution Control
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
9511 West Harrison
Des Plaines, Illinois 60016

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

The following emission units are owned and operated by Upper Rock Energy Partners, L.L.C. (ID #161025ABZ):

Emission Unit	Description	Date Constructed	Emission Control Equipment
Active Gas Collection System	Active Gas Collection System Used to Route Landfill Gas to Engines and/or Open flare*	April 1998	Engines and/or Flare
Engine/Generator 1	987-kilowatt (kW) Jenbacher Energie Systems landfill gas fired gensets (Model JGC 320 GS-L.L.*	January, 2000	None
Engine/Generator 2	987-kilowatt (kW) Jenbacher Energie Systems landfill gas fired gensets (Model JGC 320 GS-L.L.*	January, 2000	None
Engine/Generator 3	987-kilowatt (kW) Jenbacher Energie Systems landfill gas fired gensets (Model JGC 320 GS-L.L.*	January, 2000	None
Open flare	Open flare Used to Burn Landfill Gas*	June 1998	None

* Landfill gas utilized in the above emission units is generated by Upper Rock Island County Landfill, Inc. (I.D. #161025ABU).

The following emission units are owned and operated by Upper Rock Island County Landfill, Inc. I.D. #161025ABU:

Emission Unit	Description	Significant Dates	Emission Control Equipment
MSW Landfill	Active Area Upper Rock Island County Landfill	Commenced Construction 1981 Last Modification: July 1998	Gas to Energy Facilty[1] with Backup Utility (Open) Flare[2]
Fugitive PM Emissions	Paved/Unpaved Traffic Areas, Parking Lots, and Roadways	--	None

[1] Adjacent gas to energy plant owned and operated by Upper Rock Energy Partners, L.L.C. (ZAPCO Energy Tactics Corp.), I.D. No. 161025ABZ.

[2] Backup utility (open) flare owned and operated by Upper Rock Energy Partners, L.L.C. (ZAPCO Energy Tactics Corp.), I.D. No. 161025ABZ

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. Significant Permit Modification

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Application For Construction Permit (For CAAPP Sources Only)	For Illinois EPA use only
	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

MED:psj