PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 9-5628-00019/00002
Effective Date: 02/26/2015 Expiration Date: 02/25/2016

Permit Issued To:SYNERGY BIOGAS LLC
30 LAKEWOOD CIRCLE NORTH
GREENWICH, CT 06830

Contact: BOB BLYTHE
SYNERGY BIOGAS LLC
6534 LEMLEY RD
WYOMING, NY 14591-14591
(609) 592-4727

Facility: SYNERGY BIOGAS PLANT
6466 LEMLEY RD
WYOMING, NY 14591

Description:
(1) Synergy Biogas, LLC is the owner and operator of a renewable energy facility located at 6534 Lemely Road in the Town of Covington, Wyoming County, New York. The Synergy Biogas Plant produces biogas by anaerobically digesting dairy manure and food processing wastes. An existing dairy farm supplies the majority of the manure from 2,400 lactating cow equivalents used in the biogas facility and provides the location for the biogas facility.

(2) This renewal permit includes the continued operation of the biogas facility. Biogas is produced by mixing and anaerobically digesting manure and other available organic waste. Biogas is then combusted in a reciprocating engine that drives a generator to produce electricity. Heat from the engine is recovered for use in the process. The process system consists of a steel digester tank, containerized support systems, one containerized combined heat and power generation (CHP) units with a 1,966 bhp GE Jenbacher JS 420 engine, an open flare and an existing manure collection system. On a daily basis, the facility is designed to process approximately 80,000 gallons of manure and up to 40,000 gallons food waste.

(3) Synergy Biogas, LLC must comply with the applicable requirements of *40CFR60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* for the stationary spark ignition internal combustion engine.

(4) The emission standards are as follows:
Carbon monoxide = 5.0 grams per brake horsepower-hour or 610 ppmvd at 15% oxygen

Oxides of nitrogen = 2.0 grams per brake horsepower-hour or 150 ppmvd at 15% oxygen.
Volatile organic compounds = 1.0 gram per brake horsepower-hour or 80 ppmvd at 15% oxygen.

(5) The engine must be tested every 8,760 hours of operation or every 3 years, whichever is first. The second test of the engine occurred on January 15, 2015 and the total run time on the engine was 20,333 hours. **The next compliance test must be completed when the total hours of engine operation are approximately 29,000 hours.**

(6) The facility must keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(7) The open combustion device shall be operated in accordance with 40CFR60.18. On-going compliance monitoring of the flare is completed by operating a flame temperature and gas flow rate monitoring device.

(8) The next renewal application must be submitted to the department at least 180 days, but not more than 18 months, prior to the date of permit expiration. While the renewal application is being processed by the department, the owner or operator of the facility may continue to operate under the terms and conditions of the existing permit, provided the application is submitted in accordance with 6NYCRR Part 201-5.2(c).

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator: LISA M CZECHOWICZ
NYSDEC - REGION 9
270 MICHIGAN AVE
BUFFALO, NY 14203-2915

Authorized Signature: _____ Date: ___ / ___ / _____

Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

LIST OF CONDITIONS

DEC GENERAL CONDITIONS
General Provisions
Facility Inspection by the Department
Relationship of this Permit to Other Department Orders and Determinations
Applications for permit renewals, modifications and transfers
Permit modifications, suspensions or revocations by the Department
Facility Level
Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS

DEC GENERAL CONDITIONS
****** General Provisions ******
GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department
Applicable State Requirement: ECL 19-0305

Item 1.1:
The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:
The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1.3:
A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations
Applicable State Requirement: ECL 3-0301 (2) (m)

Item 2.1:
Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 3: Applications for permit renewals, modifications and transfers
Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:
The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 3.2:
The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Item 3.3:
Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

Condition 4: Permit modifications, suspensions or revocations by the Department
Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:
The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

a) materially false or inaccurate statements in the permit application or supporting papers;
b) failure by the permittee to comply with any terms or conditions of the permit;
c) exceeding the scope of the project as described in the permit application;
d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

****** Facility Level ******

Condition 5: Submission of application for permit modification or renewal-REGION 9 HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:
Submission of applications for permit modification or renewal are to be submitted to:
NYSDEC Regional Permit Administrator
Region 9 Headquarters
Division of Environmental Permits
270 Michigan Avenue
Buffalo, NY 14203-2915
(716) 851-7165

Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To:SYNERGY BIOGAS LLC
30 LAKEWOOD CIRCLE NORTH
GREENWICH, CT 06830

Facility: SYNERGY BIOGAS PLANT
6466 LEMLEY RD
WYOMING, NY 14591

Authorized Activity By Standard Industrial Classification Code:
0291 - GEN FARMS PRIMARILY LIVESTOCK
4911 - ELECTRIC SERVICES

Permit Effective Date: 02/26/2015 Permit Expiration Date: 02/25/2016

LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS
Facility Level

1 6 NYCRR 211.1: Air pollution prohibited
2 40CFR 60.4246, NSPS Subpart JJJJ: Subpart A provisions that apply to facilities subject to Subpart JJJJ
3 40CFR 63.6665, Subpart ZZZZ: General provisions

Emission Unit Level

EU=1-CHPCE,Proc=001

4 40CFR 60.4230(a)(4)(i), NSPS Subpart JJJJ: Applicability of facilities subject to Subpart JJJJ
5 40CFR 60.4233(e), NSPS Subpart JJJJ: Compliance Demonstration
6 40CFR 60.4233(e), NSPS Subpart JJJJ: Compliance Demonstration
7 40CFR 60.4233(e), NSPS Subpart JJJJ: Compliance Demonstration
8 40CFR 60.4234, NSPS Subpart JJJJ: Length of time a facility is subject to Subpart JJJJ
9 40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ: Compliance Demonstration
10 40CFR 60.4244, NSPS Subpart JJJJ: Compliance Demonstration
11 40CFR 60.4245(a), NSPS Subpart JJJJ: Compliance Demonstration
12 40CFR 60.4245(c), NSPS Subpart JJJJ: Compliance Demonstration

EU=1-CHPCE,Proc=002,ES=FLR01

13 6 NYCRR 212.4 (a): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS
Facility Level

14 ECL 19-0301: Contaminant List
15 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
16 6 NYCRR Subpart 201-5: Emission Unit Definition
17 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
18 6 NYCRR 201-5.3 (c): Compliance Demonstration
19 6 NYCRR 211.2: Visible Emissions Limited

Emission Unit Level

20 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
21 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

FEDERALLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: **Sealing - 6 NYCRR 200.5**

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: **Acceptable Ambient Air Quality - 6 NYCRR 200.6**

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Item C: **Maintenance of Equipment - 6 NYCRR 200.7**

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications,

required to operate such device effectively.

Item D: Unpermitted Emission Sources - 6 NYCRR 201-1.2

If an existing emission source was subject to the permitting requirements of 6 NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

(a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.

(b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

Item E: Emergency Defense - 6 NYCRR 201-1.5

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated;

(3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Item F: **Recycling and Salvage - 6 NYCRR 201-1.7**

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item G: **Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8**

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Item H: **Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)**

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item I: **Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR 201-3.3 (a)**

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item J: **Required Emission Tests - 6 NYCRR 202-1.1**

An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

Item K: **Open Fires Prohibitions - 6 NYCRR 215.2**
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item L: **Permit Exclusion - ECL 19-0305**
The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item M: **Federally Enforceable Requirements - 40 CFR 70.6 (b)**
All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 1: **Air pollution prohibited**

Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:6 NYCRR 211.1

Item 1.1:
No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

Condition 2: Subpart A provisions that apply to facilities subject to Subpart JJJJ
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:40CFR 60.4246, NSPS Subpart JJJJ

Item 2.1:
The following provisions of 40 CFR 60 Subpart A apply to this facility: 60.1 through 60.12, 60.14 through 60.17 and 60.19.

Condition 3: General provisions
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:40CFR 63.6665, Subpart ZZZZ

Item 3.1:
Table 8 of 40 CFR 63 Subpart ZZZZ shows which parts of the General Provisions 40 CFR 63.1 through 40 CFR 63.15 apply to this facility. Facility is responsible for ensuring they comply with all General Provisions contained in Table 8.

****** Emission Unit Level ******

Condition 4: Applicability of facilities subject to Subpart JJJJ
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:40CFR 60.4230(a)(4)(i), NSPS Subpart JJJJ

Item 4.1:
This Condition applies to Emission Unit: 1-CHPCE
Process: 001

Item 4.2: The provisions of 40 CFR 60 Subpart JJJJ are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) that commence construction after June 12, 2006,and where the stationary SI ICE are manufactured on or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except

lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP). For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

Condition 5: **Compliance Demonstration**
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:40CFR 60.4233(e), NSPS Subpart JJJJ

Item 5.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-CHPCE
Process: 001

Regulated Contaminant(s):
CAS No: 000630-08-0 CARBON MONOXIDE

Item 5.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

CARBON MONOXIDE EMISSION STANDARDS

As per § 60.4233(e), the carbon monoxide emission standard for the 1,966 HP GE Jenbacher is 5.0 grams per brake horsepower-hour or 610 ppmvd at 15% oxygen.

Parameter Monitored: CARBON MONOXIDE
Upper Permit Limit: 610 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: As specified in table 2 40CFR60 Subpart JJJJ
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 6: **Compliance Demonstration**
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:40CFR 60.4233(e), NSPS Subpart JJJJ

Item 6.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-CHPCE
Process: 001

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 6.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

OXIDES OF NITROGEN EMISSION STANDARDS

As per § 60.4233(e), the oxides of nitrogen emission standard for the 1,966 HP GE Jenbacher is: 2.0 grams per brake horsepower-hour or 150 ppmvd at 15% oxygen.

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 150 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: As specified in Table 2 40CFR60 Subpart JJJJ
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 7: Compliance Demonstration
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:40CFR 60.4233(e), NSPS Subpart JJJJ

Item 7.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-CHPCE
Process: 001

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 7.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:

VOLATILE ORGANIC COMPOUND EMISSION STANDARDS

As per § 60.4233(e), the volatile organic compound emission standard for the 1,966 HP GE Jenbacher is 1.0 gram per brake horsepower-hour or 80 ppmvd at 15% oxygen.

Parameter Monitored: VOC
Upper Permit Limit: 80 parts per million by volume (dry, corrected to 15% O2)
Reference Test Method: As specified in Table 2 40CFR60 Subpart JJJJ
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 8: Length of time a facility is subject to Subpart JJJJ
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:40CFR 60.4234, NSPS Subpart JJJJ

Item 8.1:
This Condition applies to Emission Unit: 1-CHPCE
Process: 001

Item 8.2: Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

Condition 9: Compliance Demonstration
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:40CFR 60.4243(b)(2)(ii), NSPS Subpart JJJJ

Item 9.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-CHPCE
Process: 001

Item 9.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

COMPLIANCE REQUIREMENTS

As per § 60.4243(b)(2)(ii), the compliance requirements for the 1,966 HP GE Jenbacher are as follows:

(1) Conduct performance testing every 8,760 hours or every 3 years, whichever comes first, to demonstrate compliance.

(2) Keep a maintenance plan and records of conducted maintenance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 10: Compliance Demonstration
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:40CFR 60.4244, NSPS Subpart JJJJ

Item 10.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-CHPCE
Process: 001

Item 10.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

PERFORMANCE TEST REQUIREMENTS

As per § 60.4244, conduct performance tests for the 1,966 HP GE Jenbacher as follows:

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in § 60.8 and under the specific conditions that are specified by Table 2 to this subpart.

(b) Do not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.

(c) Conduct three separate test runs for each performance test required in this section, as specified in § 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.

(d) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 1 of this section.

(e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section.

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

§ 60.4245(d) Submit a copy of each performance test within 60 days after the test has been completed.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 11: Compliance Demonstration
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:40CFR 60.4245(a), NSPS Subpart JJJJ

Item 11.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-CHPCE
Process: 001

Item 11.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(2) Maintenance conducted on the engine.

(3) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 12: Compliance Demonstration
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:40CFR 60.4245(c), NSPS Subpart JJJJ

Item 12.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-CHPCE
Process: 001

Item 12.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in

§60.7(a)(1). The notification must include the following:

(1) Name and address of the owner or operator;

(2) The address of the affected source;

(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(4) Emission control equipment; and

(5) Fuel used.

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 13: Compliance Demonstration
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable Federal Requirement:6 NYCRR 212.4 (a)

Item 13.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-CHPCE
Process: 002 Emission Source: FLR01

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC

Item 13.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

(1) Synergy Biogas LLC shall operate an open combustion deice (i.e., flare) when the engine is not operating to reduce and destruct VOC emissions from the collected digester gas. The flare shall be operated in accordance with the federal New Source Performance Standards established for open flares, identified as 40CFR60.18, and summarized below:

(a) §60.18(c)(1) - The flare shall be operated with no visible emissions except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(b) §60.18(c)(2) - The flare shall be operated with a flame present at all times. The presence of a flame shall be monitored using a thermocouple or similar.

(c) §60.18(c)(3)(ii) - The flare shall be used only with the net heating value of the gas being combusted is 200 British Thermal Units per standard cubic foot (Btu/scf) or greater.

(d) §60.18(c)(4)(i) - The flare shall be designed for and operated with an exit velocity less than 60 ft/sec.

(e) §60.18(c)(4)(iii) - The flare is allowed to be operated with an exit velocity less than the velocity, Vmax, and less than 400 ft/sec as determined by the methods specified in §60.18(f)(4) and (f)(5).

(f) §60.18(d) - Monitor the flare to ensure it is operated and maintained in conformance with the design;

(g) §60.18(e) - The flare shall be operated at all times when emissions may be vented to it.

(2) The on-going compliance monitoring of the open flare shall include:

(a) Operation and maintenance of the flare to prevent deterioration and promote good combustion in accordance with manufacturer specifications.
(b) Operation, maintenance and calibration of a temperature monitoring device equipped with a continuous recorder to document the flame temperature while the flare is operational.
(c) Operation, maintenance and calibration of a gas flow rate measuring device that shall record the flow at least every 15 minutes while the flare is operational.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: **Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)**
Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

Item B: **General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5**
Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

STATE ONLY APPLICABLE REQUIREMENTS
The following conditions are state only enforceable.

Condition 14: **Contaminant List**
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable State Requirement:ECL 19-0301

Item 14.1:
Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000630-08-0
Name: CARBON MONOXIDE

CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN

CAS No: 0NY998-00-0
Name: VOC

Condition 15: Malfunctions and start-up/shutdown activities
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable State Requirement:6 NYCRR 201-1.4

Item 15.1:
(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment malfunctions, maintenance, or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when requested to do so, or when so required by a condition of a permit issued for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.

(c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates.

(d) The department may also require the owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Condition 16: Emission Unit Definition
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 16.1:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 1-CHPCE
Emission Unit Description:
Emission Unit 1-CHPCE includes operation of a renewable energy facility based on the production of biogas by anaerobic digestion. Biogas is produced by mixing and anaerobically digesting manure and other available organic waste. The biogas is burned to produce electricity and thermal energy. The system consist of a steel digester tank, containerized support systems, one containerized combined heat and power generation (CHP) unit, an open flare and an existing manure collection system.

Building(s): CHP-1

Condition 17: Renewal deadlines for state facility permits
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable State Requirement:6 NYCRR 201-5.2 (c)

Item 17.1:
The owner or operator of a facility having an issued state facility permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Condition 18: Compliance Demonstration
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable State Requirement:6 NYCRR 201-5.3 (c)

Item 18.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 18.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Any reports or submissions required by this permit shall

be submitted to the Regional Air Pollution Control
Engineer (RAPCE) at the following address:

Division of Air Resources
NYS Dept. of Environmental Conservation
Region 9
270 Michigan Ave.
Buffalo, NY 14203

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 19: Visible Emissions Limited
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable State Requirement:6 NYCRR 211.2

Item 19.1:
Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

****** Emission Unit Level ******

Condition 20: Emission Point Definition By Emission Unit
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 20.1:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 1-CHPCE

Emission Point: CHP01
Height (ft.): 35 Diameter (in.): 16
NYTMN (km.): 4746.044 NYTME (km.): 251.082 Building: CHP-1

Emission Point: FLARE
Height (ft.): 21 Diameter (in.): 43
NYTMN (km.): 4746.044 NYTME (km.): 251.082

Condition 21: Process Definition By Emission Unit
Effective between the dates of 02/26/2015 and 02/25/2016

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 21.1:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-CHPCE
Process: 001
Process Description:
Process 001 includes a single combined heat and power (CHP) 1,966 bhp internal combustion engine (GE Jenbacher JS 420 having a Serial # 1031850 and built in 2011) typically operating at full load 100% of the year. Biogas from the digester is sent through a desulphurization unit and received by the engine at a rate of 501 standard cubic feet per minute.

Emission Source/Control: CHP01 - Combustion
Design Capacity: 1,966 brake horsepower

Emission Source/Control: DSLPH - Control
Control Type: FLUE GAS DESULFURIZATION SYSTEM

Emission Source/Control: DGSTR - Process
Design Capacity: 2.375 million gallons

Item 21.2:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-CHPCE
Process: 002
Process Description:
Process 002 includes an open flare which is expected to be used at full load when the engine is not operating.

Emission Source/Control: FLR01 - Control
Control Type: FLARING

Emission Source/Control: DGSTR - Process
Design Capacity: 2.375 million gallons