NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Region 9 Main Office
270 Michigan Avenue, Buffalo, NY 14203-2915
P: (716) 851-7000 | F: (716) 851-7211
www.dec.ny.gov

July 30, 2015

Mr. Bruce Bailey
Sustainable BioElectric LLC
50 Public Square, Suite 1060
Cleveland, Ohio 44113

Dear Mr. Bailey:

PERMIT TRANSMITTAL LETTER
NIAGARA/BUFFALO BIOENERGY LAND APPLICATION SITES
MODIFICATION TO REMOVE SITE ERQ-02-08 IN ERIE COUNTY
DEC PERMIT # 9-9909-00112/00001

Enclosed is your modified permit which was issued in accordance with applicable provisions of the Environmental Conservation Law. This modification removes Field ERQ-02-08 from the permit as you requested in your July 22, 2015 letter. The permit is valid for only that project, activity or operation expressly authorized.

The DEC permit number and Program ID number, if applicable, should be retained for your records and should be referenced on all future correspondence and applications related to the permit. If modifications are desired after permit issuance, you must submit the proposed revisions and receive written approval from the Permit Administrator prior to initiating any change. If the Department determines that the modification represents a material change in the scope of the authorized project, activity, operation or permit conditions, you will be required to submit a new application for permit.

Please note the expiration date of the permit. Applications for permit renewal should be made well in advance of the expiration date (minimum of 30 days) and submitted to the Regional Permit Administrator at the above address. For SPDES, Solid Waste and Hazardous Waste Permits, renewals must be made at least 180 days prior to the expiration date.

Please review all permit conditions carefully. In particular, identify your initial responsibilities under this permit in order to assure timely action if required. Since failure to comply precisely with permit conditions may be treated as a violation of the environmental conservation law, you are requested to provide a copy of the permit to the project contractor, facility operator, and other persons directly responsible for permit implementation (if any).

If you have any questions, please contact this office at the above address.

Respectfully,
David S. Denk
Regional Permit Administrator

DSD:lmc

Enclosure
ecc: Peter Grasso, NYSDEC Division of Materials Management
Efrat Forgette, NYSDEC Division of Materials Management
Sally Rowland, NYSDEC Division of Materials Management
Hon. Earl Gingerich, Supervisor, Town of Marilla
Hon. Ellen Grant, Supervisor, Town of Bennington

PERMIT

Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
SUSTAINABLE BIOELECTRIC LLC

50 PUBLIC SQUARE STE 1060
CLEVELAND, OH 44113
(216) 416-3801

Facility:
NIAGARA/BUFFALO BIOENERGY LAND APPLICATION SITES
VARIOUS FARM FIELDS
VARIOUS, NY

Facility Location: in SEVERAL COUNTIES in THIS REGION
Facility Principal Reference Point: NYTM-E: NYTM-N:
Latitude: Longitude:

Authorized Activity: Buffalo BioEnergy and Niagara BioEnergy anaerobic digestion facilities are merchant facilities that accept manure, food waste, fats, oils, greases, sludge from wastewater treatment plants (biosolids), energy crops, glycerin, stillage and other by-products from the production of ethanol and bio-diesel. Digestate, effluent generated at the anaerobic digestion facilities, may be land applied for agronomic value. Originally, a permit was issued to Sustainable BioElectric, LLC for the land application of the digestate on multiple farm fields in Niagara County.

This modification removes Field ERQ-02-08 from the permit.

Permit Authorizations

Solid Waste Management - Under Article 27, Title 7
Permit ID 9-9909-00112/00001

New Permit	Effective Date: 7/24/2013	Expiration Date: 7/23/2018
Modification # 1	Effective Date: 5/13/2014	Expiration Date: 7/23/2018
Modification # 2	Effective Date: 6/29/2015	Expiration Date: 7/23/2018
Modification # 4	Effective Date: 7/30/2015	Expiration Date: 7/23/2018

NYSDEC Approval

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

Permit Administrator: LISA M CZECHOWICZ, Deputy Regional Permit Administrator
Address: NYSDEC Region 9 Headquarters
270 Michigan Ave
Buffalo, NY 14203 -2915

Authorized Signature: Lisa M. Czechowicz Date 7/30/15

Distribution List

PETER GRASSO
EFRAT FORGETTE
SALLY ROWLAND

Permit Components

SOLID WASTE MANAGEMENT PERMIT CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

SOLID WASTE MANAGEMENT PERMIT CONDITIONS

1. **Conformance With Plans** All activities authorized by this permit must be in strict conformance with the permit application, plans and materials prepared by (see Solid Waste Management Permit Conditions 4 and 5 of this permit) on (see Solid Waste Management Permit Conditions 4 and 5 of this permit).

2. **Permit Conflicts** If any condition of this permit conflicts with the approved documents identified in Solid Waste Management Permit Conditions 4 and 5, the Solid Waste Management Permit Condition shall prevail.

3. **Permit Applicability** This permit supersedes all previously issued Solid Waste Management Facility permits and permit modifications issued by the New York State Department of Environmental Conservation (NYSDEC) for this operation.

APPROVED DOCUMENTS AND WASTES

4. **Approved Documents** All activities conducted under this permit shall be in accordance with the applicable requirements in 6 NYCRR Part 360 (current edition and as subsequently modified), the special conditions cited herein, and the following approved reports and documents for this facility:

- "Milleville Farms 360 Permit" application dated November 2012 and prepared by Quasar Energy Group, LLC
- Letter dated November 5, 2012 from NYSDEC (Lisa Porter) to Quasar (Alan Johnson) regarding land application permit
- Letter dated November 5, 2012 from Quasar (Bruce Bailey) to NYSDEC (Efrat Scharf Forgette) containing Soil Analysis data
- Letter dated November 21, 2012 from Quasar (Bruce Bailey) to NYSDEC (Lisa Porter) regarding response to November 5, 2012 Notice of Incomplete Application.
- Landspreading Permit Application (modification) dated May 20, 2013 from Quasar (Bruce Bailey) to NYSDEC (Efrat Scharf Forgette)
- Notice of Incomplete Application dated October 8, 2013 from NYSDEC (Lisa Porter) to Quasar (Bruce Bailey)
- Letter dated October 14, 2013 from Quasar (Bruce Bailey) to NYSDEC (Lisa Porter) with updated EAF form and set back acreage for Travis farms
- Email dated October 23, 2013 from NYSDEC (Lisa Porter) to Quasar (Bruce Bailey) regarding Notice of Incomplete Application
- Letter dated November 13, 2013 from Quasar (Bruce Bailey) to NYSDEC (Lisa Porter) in response to October 8, 2013 Notice of Incomplete Application
- Letter dated January 10, 2014 from Quasar (Bruce Bailey) to NYSDEC (Lisa Porter) regarded Revised Drawings for Travis Farms
- Second Notice of Incomplete Application dated February 11, 2014 from NYSDEC (Lisa Porter) to Quasar (Bruce Bailey)
- Letter dated March 13, 2014 from Quasar (Bruce Bailey) to NYSDEC (Lisa Porter) in response to second February 11, 2014 Notice of Incomplete Application
- Letter dated March 18, 2014 from Quasar (Bruce Bailey) to NYSDEC (Lisa Porter) confirming withdrawl of Janiga Farms from application
- Third Notice of Incomplete Application dated April 7, 2014 to Quasar (Bruce Bailey) from NYSDEC (Lisa Porter)
- Memorandum by NYSDEC dated July 2, 2014 with subject "Acceptable Soil Types for Land Application Facilities Under Subpart 360-4"
- Letter from Quasar (Bruce Bailey) to NYSDEC (Lisa Porter Czechowicz) dated July 22, 2015 requesting removal of field ERQ-02-08 on Eastwood Road.

5. **Approved Plans** The approved plan sheets for this facility include:

Sheet #	Sheet Title	Date	Prepared by
FS-1	Regional Map	March 11, 2014	Quasar
FS-13 - FS-29	Travis Farms	March 11, 2014	Quasar
FS-1 - FS-10	Milleville Farms	November 15, 2012	Quasar

6. **Approved Sites** The following sites are approved for land application:

ID #	Nearest Road	Acres for Injection	Drawing # in 3/11/14 Submittal
ERQ-02-01	Eastwood Road, between Blood & Williston Rd.	21.7	FS-13; FS-15
ERQ-02-02	same	8.0	FS-13; FS-16
ERQ-02-04	Eastwood Road, near Williston Rd.	34.1	FS-17; FS-19
ERQ-02-05	same	2.7	FS-17; FS-20
WYQ-01-01	Clinton Street, near Old Clinton St.	24.1	FS-24; FS-26
WYQ-01-02	Clinton Street, near Reilein Rd.	28.0	FS-24; FS-27
WYQ-01-03	Clinton Street, near Folsomdale Rd.	8.9	FS-24; FS-28
WYQ-01-04	same	17.2	FS-24; FS-29
			Drawing # in 11/15/12 Submittal
NIQ-01-01	Randall Road	97.5	FS-1
NIQ-01-02	Daniels Road	82.6	FS-2
NIQ-01-04	Dickersonville Road	18.1	FS-3
NIQ-01-05	Lockport Road	48.5	FS-4
NIQ-01-06	Saunders Settlement Road	89.6	FS-5
NIQ-01-07	Saunders Settlement Road	53.3	FS-6
NIQ-01-08	Saunders Settlement Road	66.6	FS-7
NIQ-01-09	Cambria Wilson Road	47.5	FS-8
NIQ-01-11	Nash Road	37.6	FS-10

7. **Source of Waste** Waste to be land applied is limited to digestate from either Niagara BioEnergy or Buffalo BioEnergy Anaerobic Digesters.

8. **CRA Approved Municipality** The permittee shall not receive at the facility solid waste which was generated within a municipality that has either not completed a comprehensive recycling analysis (CRA) or is not included in another municipality's CRA satisfying the requirements of 6 NYCCRR Part 360-1.9(f) which has been approved by the Departement and implemented the recyclables recovery program determined to be feasible by the analysis.

OPERATIONS

9. **Biosolids Source and Digestate Analysis** Each biosolids source and the digestate resulting from the digestion of biosolids must be analyzed for parameters and frequency outlined in Part 360-4.7(c)(1). This includes:

- Parameters for analysis of the biosolids and digestate are found in Part 360-5.10, Table 1, Groups A and B.
- Samples must be managed in accordance with Part 360-5.10, Table 12. Samples must not be frozen.
- Pollutant limits for the source materials and digestate must not exceed those listed in Part 360-5.10, Table 4.

Table 4 Pollutant Limits - Class B Materials & Input To Class A Facilities

Parameter	Monthly Average Concentration mg/kg, dry weight	Maximum Concentration mg/kg, dry weight
Arsenic (As)	41	75
Cadmium (Cd) *	21	85
Chromium (Cr-total)	1000	1000
Copper (Cu)	1500	4300
Lead (Pb)	300	840
Mercury (Hg)	10	57
Molybdenum (Mo)	40	75
Nickel (Ni)	200	420
Selenium (Se)	100	100
Zinc (Zn)	2500	7500

*if the monthly average cadmium concentration exceeds 5 ppm, dry weight basis, the cadmium/zinc ratio must not exceed 0.015

10. **Biosolids Treatment** All biosolids must be treated by a method to reduce pathogens in accordance with 6 NYCRR Part 360-4.7(b)(1) (i.e. anaerobic digestion) prior to land application. In addition, either at the digester or the land application site, one of the vector attraction reduction criteria found in Part 360-4.7(b) must be met.

11. **Soil Analyses** Annual soil sampling is required in accordance with 6 NYCRR Part 360-4.4(f). The soil should be analyzed for the following parameters: pH, arsenic, cadmium, chromium (total), copper, lead, mercury, molybdenum, nickel, selenium, and zinc. A minimum of one analysis is required for every 50 acres, or fraction thereof. Each soil sample must be a composite of a minimum of ten randomly selected sample locations.

12. **Management Practices** The soil pH must be adjusted to 6.5 standard units or higher prior to land application.

13. **Nutrient Loading** The application rate must not exceed the agronomic rate for the crop grown. Calculations showing the nutrient loading, including nitrogen, phosphorus and potassium are required annually. Formulas shown in 6 NYCRR Part 360-4.4(c) should be used.

14. **Metal Loading** The cumulative metal loading limits are found in Table 5 of 6 NYCRR Part 360-5.10. The metal loading must not exceed 20% of the cumulative loading limit in any one year.

Table 5 Cumulative Metal Loading Limits

Metals	Cumulative Loading Limit (lbs./acre)	
	Ag. Soil Groups 1-3	Ag. Soil Groups 4-10
Cadmium	3	4
Chromium	300	446
Copper	75	112
Lead	267	267
Nickel	30	45
Zinc	150	223

15. **Distance to Groundwater** Land application is prohibited in areas where groundwater is within 24 inches of the ground surface at the time of application. Verification of this separation distance is required.

16. **Distance to Bedrock** Land application is prohibited in areas where bedrock lies less than 24 inches below the ground surface.

17. **Saturated Ground** Land application is prohibited on water saturated ground or during heavy rainfall.

18. **Snow-covered Ground** Land application on snow-covered or frozen ground is only acceptable if applied by direct injection below the land surface.

19. **Defining the Boundaries** Each area must be staked prior to land application to define the application boundaries.

20. **Control of Access** Access to the site must be controlled by the use of posted signs.

21. **Slope Limitations** Land application is prohibited on land with a slope exceeding 15 percent.

22. **Management Practices** Proper agricultural management practices must be used to minimize runoff and erosion.

23. **Transportation** Transportation of the digestate over public roads must be done by a waste hauler permitted pursuant to 6 NYCRR Part 364.

QUARTERLY/ANNUAL REPORTS

24. Reporting Requirements The permittee must prepare an annual report containing the information required by 6 NYCRR Part 360-4.6(c). The report shall be prepared on a form provided by or acceptable to the Department, and shall be submitted no later than March 1 following the reporting year. The report shall contain all the information required by 6 NYCRR Part 360-4.6(c)(3). and shall be submitted to the following addresses:

NYSDEC
Regional Materials Management Engineer
270 Michigan Avenue

Buffalo, New York 14203-2915

NYSDEC
Division of Materials Management
Bureau of Waste Reduction & Recycling
9th Floor
625 Broadway
Albany, New York 12233-7253

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by The Department 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).

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

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.

2. Relationship of this Permit to Other Department Orders and Determinations 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.

3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit 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. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator
NYSDEC Region 9 Headquarters
270 Michigan Ave
Buffalo, NY14203 -2915

4. **Submission of Renewal Application** The permittee must submit a renewal application at least 180 days before permit expiration for the following permit authorizations: Solid Waste Management.

5. **Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. 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.

6. **Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification
The permittee, excepting state or federal agencies, 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 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 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.