

# New York State Department of Environmental Conservation

## Division of Environmental Permits, Region 9

270 Michigan Avenue, Buffalo, New York 14203-2915

Phone: (716) 851-7165 · Fax: (716) 851-7168

Website: [www.dec.ny.gov](http://www.dec.ny.gov)



Joe Martens  
Commissioner

April 5, 2013

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

Dear Permittee:

**PERMIT TRANSMITTAL LETTER**  
**PERMIT NO. 9-1468-00224/00001 – SW**  
**PERMIT NO. 9-1468-00224/00002 - ASF**

Enclosed are your permits which were issued in accordance with applicable provisions of the Environmental Conservation Law. The permits are 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 permits. 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, and Air Pollution Control 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. Technical questions relating to the specific conditions of the Air State Facility permit should be directed to Ms. Marcia Ladiana of our Division of Air at 716/851-7130. Technical questions relating to the specific conditions of the Solid Waste Management permit should be directed to Ms. Efrat Forgette of our Division of Materials Management at 716/851-7220.

Respectfully,  
David S. Denk  
Regional Permit Administrator

LMP:ldg

Encl.

ecc: Mr. Mark Hans, NYSDEC Region 9, Division of Materials Management; attn: Ms. Efrat Forgette  
Mr. Alfred Carlacci, NYSDEC Region 9, Division of Air Resources; attn: Ms. Marcia Ladiana



**PERMIT**  
**Under the Environmental Conservation Law (ECL)**

**Permittee and Facility Information**

**Permit Issued To:**  
SUSTAINABLE BIOVOLT LLC  
  
50 PUBLIC SQUARE STE 1060  
CLEVELAND, OH 44113  
(216) 416-3801

**Facility:**  
BUFFALO BIOENERGY ANAEROBIC  
DIGESTION FACILITY  
4852 N AMERICA DR  
WEST SENECA, NY 14224

**Facility Location:** in WEST SENECA in ERIE COUNTY

**Facility Principal Reference Point:** NYTM-E: 195.164 NYTM-N: 4750.343  
Latitude: 42°50'41.6" Longitude: 78°43'49.3"

**Authorized Activity:** Construction and operation of an Anaerobic Digestion System (ADS) at 4852 North America Drive in the Town of West Seneca. Anaerobic digestion is a natural process where microorganisms break down biomass in the absence of oxygen. The facility will accept liquid and solid biomasses such as food wastes, FOG (fats, oil and grease), manure, energy crops (i.e. corn silage) and biosolids to be processed at the facility. The facility will consist of a 750,000 gallon complete mix anaerobic digester and a 230,000 gallon feedstock receiving tank. The facility will use an internal combustion engine to convert biogas to electricity for sale to the open market. Digested materials may be land applied only on NYSDEC approved agricultural fields as a soil amendment.

**Permit Authorizations**

**Solid Waste Management - Under Article 27, Title 7**

Permit ID 9-1468-00224/00001

New Permit

Effective Date: 4/5/2013

Expiration Date: 4/4/2018

**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 PORTER, Deputy Regional Permit Administrator  
Address: NYSDEC REGION 9 HEADQUARTERS  
270 MICHIGAN AVE  
BUFFALO, NY 14203 -2915

Authorized Signature: Lisa M. Porter

Date 4/5/13



## 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. Permit Conflicts** If any condition of this permit conflicts with the approved report and plans identified in Solid Waste Management Permit Condition 4 of this permit, the Solid Waste Management Permit Condition shall prevail.

**2. Emergency Reporting** In the event of an emergency, including but not limited to fires, explosion or on-site spills, the Regional Materials Management Engineer (RMME) shall be notified of the emergency within 24 hours of discovery. Oral reports due on weekends or holidays shall be made on the next business day. The details of the incident and the remediation or corrective action(s) taken shall be fully described in writing to the RMME within five working days of the event.

### APPROVED DOCUMENTS AND WASTES

**3. 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 Condition 4 of this permit) on (see Solid Waste Management Permit Condition 4 of this permit).

**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 subsequently modified), the special conditions cited herein, and the following approved reports and documents for this facility:

- "Buffalo BioEnergy Anaerobic Digester System (ADS) Facility Initial Installation Subpart 360-1.9(b) Non-Specific Facilities Solid Waste Management Permit Application," dated June 2012 and prepared by CRA Infrastructure & Engineering Inc.
- Letter dated August 16, 2012 from Quasar Energy Group (Bruce Bailey) to NYSDEC (Lisa Porter/Bruno DiBella) regarding response to DEC comments of July 19, 2012 and July 30, 2012. This letter includes the "Biofilter Management" plan dated October 3, 2011 prepared by Quasar Energy Group.
- "Buffalo BioEnergy, LLC. Anaerobic Digestion Facility Sludge Management Plan for Niagara Bioenergy" dated October 2012 and prepared by Quasar Energy Group.

**5. 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 NYCRR Part 360-1.9(f) which has been approved by the Department and implemented the recyclables recovery program determined to be feasible by the analysis.



**6. Description of Waste and Amounts** The facility is designed to receive up to 52,524 wet tons/year (144 tons/day) of the following wastes:

- Manure from farms and/or livestock based events
- Foodwaste in liquid, semi-solid and solid form from food processors
- FOG - fats, oil and grease
- Biosolids from municipal wastewater treatment facilities
- Energy crops including grain, hay, silage, spill/soiled feed etc.
- Glycerin, Stillage, & Other Biogas producing by-products

**7. Approved Biosolids** Biosolids from municipal wastewater treatment facilities must be approved by the Department prior to acceptance.

### OPERATIONS

**8. Facility Sign** A sign, which clearly shows the hours of operation and types of waste accepted and not accepted at the facility must be located at the entrance area.

**9. Access Control** Access to and use of the facility must be strictly and continuously controlled by fencing, gates, signs, natural barriers or other suitable means.

**10. Noise Control** Noise levels resulting from equipment or operations at the facility must be controlled to prevent transmission of sound levels beyond the property line at locations zoned or otherwise authorized for residential purposes to exceed the following Leq energy equivalent sound levels:

	<u>Character of Leq Energy Equivalent Sound Levels</u>	
	7 am- 10pm	10pm - 7am
Rural	57 decibels (A)	47 decibels (A)
Suburban	62 decibels (A)	52 decibels (A)
Urban.	67 decibels (A)	57 decibels (A)

The Leq is the equivalent steady-state sound level which contains the same acoustic energy as the time varying sound level during a one-hour period. It is not necessary that the measurements to be taken over a full one-hour time interval, but sufficient measurements must be available to allow a valid extrapolation to a one hour time interval.

- If the background residual sound level (excluding any contributions from the solid waste management facility) exceeds these limits, the facility must produce an Leq exceeding that background.
- The sound level must be the weighted sound pressure level measured with the slow metering characteristic and A-weighted.
- Measuring instruments must be Type 1 general purpose sound level meters, Type 2 or corresponding special sound level meters Type S1A or S2A.
- Mufflers are required on all internal combustion-powered equipment used at the facility. Sound levels for such equipment must not exceed 80 decibels (A) at a distance of 50 feet from the operating equipment.

**11. Dust Control** Dust must be effectively controlled so that it does not constitute a nuisance or hazard to health, safety, or property. The facility owner or operator must undertake any and all measures as required by the Department to maintain and control dust at and emanating from the facility.



**12. Vector Control** The facility must be maintained so as to prevent or control on-site populations of vectors using techniques appropriate for protection of human health and the environment and prevent the facility from being a vector breeding area.

**13. Odor Control** Odors must be effectively controlled so that they do not constitute nuisances or hazards to health, safety or property.

**14. Control of Solid Waste** Solid waste must be confined to an area that can be effectively maintained, operated and controlled and good housekeeping practices must be followed. Solid waste must not be accepted at the facility unless the waste is adequately covered or confined in the vehicle transporting the waste to prevent spillage and dust.

**15. CAFO Facilities** Any Concentrated Animal Feeding Operation (CAFO) permitted facility importing or exporting waste to or from this digester facility must update their CAFO required Comprehensive Nutrient Management Plan.

**16. Storage Lagoon** Any lagoon that will be used for storage of effluent/ digestate, must be permitted by the Department prior to use.

**17. Land Application of Effluent** The facility will produce 30,000-35,000 gallons/day of digestate that may be land applied to fields that have been approved by the NYSDEC. In the event that these fields have not been approved, according to the contingency plan dated October 2012 (see Solid Waste Management Permit Condition 4 of this permit), the digestate will be sent to other digestion facilities and/or approved application sites in other states.

**18. Biosolids Source and Digestate Analysis** Each biosolids source and the digestate resulting from the digestion of biosolids must be analyzed for the frequency and parameters outlined in 6 NYCRR Part 360-4.7(c)(1).

**19. Biosolids Analysis** All biosolids must be treated by a method to reduce pathogens in accordance with 6 NYCRR Part 360-4.7(b)(1). In addition, either at the digester or the land application site, all biosolids (or the resultant digestate) must comply with the vector attraction reduction criteria found in 6 NYCRR Part 360-4.7(b)(2).

**20. BioFilter Maintenance** The biofilter must be maintained according to the BioFilter Management & Design Plan:

- Moisture control - media has to be moist enough to sustain bacteria. Water may need to be added during summer months.
- Settling - Plant operators will mark the inside of biofilter media levels in order to observe settling (which will result in compaction and less voids for treatment over time). As settling occurs steps will be taken to rejuvenate the media by fluffing.
- Maintenance of components - Locate and assure accessibility to container discharge valves, inspect and maintain piping leading to and from the biofilters, regularly inspect and maintain sumps/pits.
- Timing of Maintenance - To reduce the potential for odors to be released to the environment, all the facility biofilters shall not be replaced at the same time, because it takes time for the microorganisms to establish on new media.



**21. Water Protection** Solid Waste must not be deposited in, and must be prevented from entering surface waters, groundwaters and freshwater wetlands.

**22. Construction/ Operation/ Closure and the Waters of New York State** The facility must be constructed, operated and closed in accordance with the approved plans and in a manner that minimizes the generation of leachate and spillage, that must be disposed of, and prevent the migration of spillage or leachate into surface, groundwaters or freshwater wetlands. Leachate or spillage must not be allowed to drain or discharge into surface waters except pursuant to a State Pollutant Discharge Elimination System permit and must not cause or contribute to contravention of groundwater quality standards established by the Department pursuant to ECL Section 17-0301.

**23. Complaints** Any complaints received by the permittee about the operation of this facility must be documented in a log book, with a description of action taken to alleviate the concern and the results of the action. Documentation must be available for review at the Department's request. Any operational changes deemed necessary by the Department to correct nuisance conditions must be implemented.

#### CLOSURE

**24. Closure of Facility** All solid waste shall be removed from the facility and properly disposed of within 60 days of closure of the facility. The RMME shall be notified in writing within five business days of closure of the facility and subsequently notified of completion of cleanup activities. The Department will perform a final inspection to ensure the facility has closed in an environmentally acceptable manner.

#### REPORTING

**25. Annual Report** An annual report must be provided by March 1 of each year. This report shall include a monthly summary of:

- the total amount and type of material processed including material digested,
- the amount of liquid land applied,
- the amount of biogas generated,
- the amount of biogas burned for energy recovery
- the amount of biogas flared
- the amount of energy produced,
- all monitoring and analytical data required by this permit, and
- summary of any problem(s) associated with the facility.

The annual report shall be sent to the following:

NYS DEC  
Regional Materials Management Engineer  
270 Michigan Ave.  
Buffalo, NY 14203-2915

NYS DEC  
Chief of Organics Recycling Section  
DMM, 9th Floor  
625 Broadway  
Albany, NY 12233-7252

#### FINANCIAL SURETY

**26. Surety** The Department reserves the right to require financial assurance for this facility.



**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.