

# Application to Union County Utilities Authority for Inclusion of Linden Renewable Energy, LLC Facility in the Union County Solid Waste Management Plan

Prepared for Linden Renewable Energy, LLC

Prepared by AKRF, Inc. 307 Fellowship Road, Suite 214 Mount Laurel, NJ 08054

January 2020

# UNION COUNTY UTILITIES AUTHORITY APPLICATION FOR INCLUSION OF A SOLID WASTE FACILITY OR RECYCLING CENTER IN THE UNION COUNTY SOLID WASTE MANAGEMENT PLAN

This application shall be submitted by any person who desires to have the site of a Solid Waste Facility or a Recycling Center included within the Union County Solid Waste Management Plan as required by NJAC 7:26 et. seq.

# I. <u>TYPE OF APPLICATION</u>

Please indicate by checking the appropriate space below as to the type of facility that the Applicant is requesting to be included in the Plan and whether the facility is new or a Major Modification to an existing facility.

|            | Class A Recycling Centers                                |
|------------|--|
|            | Class B Recycling Centers                                |
| _X         | Class C Recycling Centers                                |
|            | Class D Recycling Centers                                |
|            | Materials Recovery Facility                              |
|            | Regulated Medical Waste Destruction Facility             |
|            | Regulated Medical Waste Treatment Facility               |
| <u>X</u>   | New Facility  Major Modification to an Existing Facility |
| _ <u>X</u> | _ Other: Please specify <u>Anaerobic Digester</u>        |

# II. GENERAL INFORMATION

# A. 1. Name of Facility

Identify the name of the Facility or Recycling Center which is the subject of this application as well as the street address and municipal block and lot numbers.

Linden Renewable Energy, LLC 4900 Tremley Point Road Linden, New Jersey 07036 Block # 587 Lot # Proposed 8.02

# 2. Site Information

Please attach the following documents to this application:

a. Three (3) copies of a conceptual site plan which identifies (plots) the placement of all equipment, buildings, activities and areas related to the receipt, storage,

processing and transfer of all materials. The conceptual site plan shall also indicate the routing of vehicles between the facility and all nearby roadways serving the site. The conceptual site plan shall be drawn at a scale no smaller than 1'' = 50' and sealed by a licensed Professional Engineer.

# See Attachment #1, Figure 4

b. A key map showing the boundary of the facility plotted on a 7 1/2 minute USGS Quadrangle Map.

# See Attachment #1, Figure 1

c. A municipal tax map showing the block and lot numbers of the site and adjoining properties, indicating the current land-use and zoning.

### See Attachment #1, Figure 3

d. A copy of the deed of record indicating that the applicant is the owner of the site. If the applicant is not the owner of the site, a copy of the lease for the site with its owner, and written documentation demonstrating that the owner is aware of the operations proposed for the site.

#### See Attachment #2

# B. Owner/Operator Data

1. Identify the name, address and telephone number of the person(s) that own or seek to own the facility that is the subject of this application.

Linden Renewable Energy, LLC c/o James S. Potter 163 North Shore Drive Hampton, New Hampshire 03842

#### Facility location is 4900 Tremley Point Road, Linden, New Jersey

2. State whether the person(s) that own or seek to own the facility that is the subject of this application are a corporation, partnership, sole proprietorship or a governmental entity:

# Type of Ownership: Limited Liability Company

3. If the owner of the facility is a corporation, list all person(s) owning 10% or more of such entity. If the owner is a partnership, list all general and limited partners. If the corporation or partnership is itself owned by another corporation or partnership, continue to disclose the ownership structure until the name and address of every

known corporate stockholder and individual partner exceeding the 10% ownership criteria have been listed (attach separate sheets if necessary)

# Facility owner is a Limited Liability Company

Linden Renewable Energy, LLC is applicant: Mr. James S. Potter - President/Member, Mr. Andrew L. Shea - Chief Operating Officer/Member

Wholly owned subsidiary of RNG Energy Solutions, LLC at 163 North Shore Road, Hampton, NH 03842

4. a. If the facility will be operated by someone other than the owner identified in B 1 above, identify the name, address and telephone number of the person(s) that operate or seek to operate the proposed facility.

# Linden Renewable Energy, LLC will be the Owner and Operator

As noted above, Linden Renewable Energy, LLC is a wholly owned subsidiary of RNG Energy Solutions, LLC

b. State whether the person(s) operating or seeking to operate the facility are a corporation, partnership, sole proprietorship or a governmental entity.

Type of ownership: Limited Liability Company

c. If the operator of the facility is a corporation, list all person(s) owning 10% or more of such entity in accordance with the instructions in item B 3 above.

# See responses to Question 3 and Question 4a above

5. a. Provide the name, address, telephone number, and if applicable, DEP Registration Number of any facility(ies) currently owned or operated by or being planned by the owner or operator of the facility which is the subject of this application.

# N/A

b. Please describe the nature of such facility(ies) and set forth the type, origin and daily permitted capacity of said facility(ies). If facilities(ies) are planned, give anticipated data for the first year of operation.

See Attachment #1 for Project Description and Site Plan Drawing (Figure 4)

Planned operation date is July, 2022

c. For the operating year identified in paragraph 5 b above, identify for each such facility the type, weight and amount of residue (i.e., all solid waste leaving such facility(ies) which is not recycled) and the point of disposal of such residue:

The Project will receive diverted organic waste or organic substrate that is processed by third parties off-site in satellite de-packaging facilities except for FOG or DAF which is delivered directly to the Project. The Project will only accept processed organic substrate from third party de-packaging facilities who are under contract with Linden Renewable Energy, LLC. All such de-packaging facilities shall be fully licensed and possess the requisite NJDEP permits/approvals necessary to conduct their operations. To the extent that any of the de-packaging facilities are located in Union County, they will comply with the County's Solid Waste Management Plan.

The de-packaging process removes consumer packaging and creates an AD viable slurry feedstock. This organic substrate slurry feedstock is then delivered by third parties to the Project site in 6,000 gallon capacity tanker trucks and eventually by barge. Although tested prior to leaving the depackaging facility, upon arrival at the Project, should a truckload or bargeload of organic substrate slurry be rejected for any reason, then the slurry shall be disposed of in accordance with Union County's Solid Waste Management Plan.

The Project will receive the organic substrate slurry feedstock and utilize anaerobic digestion to create renewable natural gas, liquid digestate and a marketable soil amendment (i.e., dewatered solids). The liquid digestate will then be processed on site to produce a liquid organic fertilizer.

The Project will create three forms of solid waste. The first is typical municipal solid waste generated from operating personnel in the Administration Building and other buildings and enclosures, the second is grit that is captured by the Projects de-gritting operation. This operation is designed to remove any non-digestable material which will consist mainly of small particle size sand and grit. This is done to limit the impact the sand/grit material will have on all of the pumping and piping systems and retain the integrity of the bio-reactor capacity. The total volume is less than 1 cubic yard per day. The third is spent activated carbon and metal oxide media. The activated carbon is primarily used in our odor control units and the biogas upgrading system (BUS) unit. The BUS unit requires activated carbon for control of minor volumes of H2S in the raw biogas. The minor volumes of metal oxide media is used as a tail gas polisher which removes H2S down to 1 PPM and activated carbon is used in the radial carbon adsorbers to control odor in the enclosures/buildings and process tank head spaces. The activated carbon/metal oxide media will be replaced at a rate of 45-65 tons per year. All of this material is non-hazardous with no special handling requirements and shall be disposed of in accordance with Union

County's Solid Waste Management Plan. We have extensive experience with operating these types of systems and managing the replacement and disposal of spent activated carbon.

6. Please identify the name, address, and telephone number of the owner of the site upon which the subject facility is or will be located.

**Linden Marine, LLC (Clayton Company Property Owner)** 1355 Campus Parkway, Neptune, NJ 07753 Contact: Gordon Milnes, P.E., PP, CME

# C. Material Received at Existing or to be Received at Proposed Facilities

Please identify the type and average daily weight of materials received or to be received, stored, processed or transferred at the facility.

#### 1 DEP Solid Waste Types<sup>1</sup>

| 1. BEI Bond Waste Types    |   |
|----------------------------|---|
|                            | Amount (Tons Per day)                         |
| Type 10                    | N/A   |
| Type 13                    | N/A   |
| Type 23                    | N/A   |
| Type 25                    | N/A   |
| Type 27                    | N/A   |
|                            | Up to 400 TPD of fats, oils, greases, DAF and |
| Other (Identify each type) | other organic liquid waste                    |
| Other (Identify each type) | N/A   |
| 1Notos:                    |   |

<sup>&#</sup>x27;Notes:

The total volume of organic waste and substrate processed by the LRE Project cannot exceed 1,400 TPD. Other than the FOG and DAF, based on the off-site processing of the organic material making up the organic substrate slurry received at the facility, the most accurate classification of the solid waste type is Type 72. However, LRE is confirming this classification with the NJDEP and, in any event, all resultant waste requiring disposal shall be disposed of in accordance with Union County's Solid Waste Management Plan.

| 2. | Class | Α. | Recyc. | labl | e M | laterials | , |
|----|-------|----|--------|------|-----|-----------|---|
|----|-------|----|--------|------|-----|-----------|---|

| ·                               | Amount (Tons Per day) |
|---------------------------------|-----------------------|
| Metal                           | N/A                   |
| Glass                           | N/A                   |
| Paper                           | N/A                   |
| Plastic Containers              | N/A                   |
| Corrugated and Other Cardboard  | N/A                   |
| 3. Class B Recyclable Materials |                       |
|                                 | Amount (Tons Per day) |

Amount (Tons Per day)

Concrete, asphalt, brick N/A Wood N/A

Construction and Demolition Waste N/A

Trees – trunks, stumps, branches,

Leaves, brush N/A
Petroleum Contaminated Soil N/A
Other (Identify each type) N/A

4. Class C Recyclable Materials Amount (Tons Per day)

Total Class C Recyclables could be up to 1,100 tons/day (average) diverted organic waste plus 300 tons/day of fats, oils and grease for a total 1,400 tons/day

Source Separated Food Waste Source Separated Vegetative Food Waste Source Separated Yard Trimmings

Other (Identify each type)

5. Class D Recyclables Materials

Amount (Tons Per day)

Used Oil N/A
Batteries N/A
Pesticides N/A
Thermostats N/A
Latex Paint N/A

Oil Based Paint from Households or

SQG N/A
Other (Identify each type) N/A

6. Regulated Medical Waste Treatment and/or Destruction Facilities

Amount (Tons Per day)

Cultures and Stocks N/A Pathological Wastes N/A **Human Blood and Blood Products** N/A Sharps N/A **Animal Wastes** N/A **Isolation Wastes** N/A **Unused Sharps** N/A Other (Identify each type) N/A

7. Please provide a description of the source or point of generation of all materials received or to be received, stored, processed or transferred at the facility. If the source is from multiple generators, please list the type of waste, the source community and a breakdown between municipal and commercial sources.

Source Tons Per Day

See Attachment #1, Section 2.1

# D. Disposition of Materials Received, Stored, Processed or Transferred

1. Residue (i.e. material not sent to recycling markets directly from the subject facility) a. Please describe the nature and quantity (in tons per year) of residue which the proposed facility will generate.

The facility will produce a total of approximately 3,085 dekatherms of renewable natural gas (RNG) per day. The RNG produced will be injected into the TETCO interstate pipeline, which is located approximately 1 mile north of the site.

The liquid digestate produced will total approximately 350,000 gallons per day and will be post-processed to produce a marketable liquid organic fertilizer, a marketable solid soil amendment and reclaimed water. To the extent that the marketable liquid organic fertilizer and solid soil amendment cannot be sold, it will be disposed of in accordance with the County's Solid Waste Management Plan.

The facility will produce an average of 13,000 gallons per day of organic liquid fertilizer.

The facility will also produce an average of 337,000 gallons (of the 350,000 gallons defined above) per day of very clean reverse osmosis permeate. This will be used by a third party located within the region or discharged pursuant to a NPDES permit to the Arthur Kill River.

The facility will also produce approximately 300 cubic yards per day of commercial grade digested material. This material will have similar properties to peat moss and will be marketed for use as a high value soil amendment.

b. Identify the type and quantity of any such residue that will be sent to other facilities for further extraction of recyclables.

#### N/A

c. Provide the name, address, and telephone number of any facilities identified in D b. above.

#### N/A

- d. For that portion of residue which is not to be processed for further recycling, please provide the following information:
  - i. The percentage, by weight of residue verses the total weight of materials to be received, stored, processed or transferred.

# N/A %

ii. Provide the name, address and telephone number of the facility at which the residue will be disposed. If there is more than one site at which the residue will be disposed, please list each site along with the type and quantity of residue to be disposed at that site.

#### N/A

#### E. Recycled Materials

Please list all proposed end markets for the recycled materials. Include name of Contact person and telephone number.

The facility will produce a total of approximately 3,085 dekatherms of RNG per day. The RNG produced will be injected into a nearby interstate pipeline, which is located north of the site.

The RNG will be sold as two separate products. The first is commodity gas which is sold at the applicable pipeline (TETCO) node commodity price. The second is the sale of the environmental attributes. These consist of the sale of RIN's and other credits. Both products, the commodity gas and the E-attributes have highly liquid markets and long-dated markets as well. We will be finalizing the RNG Sale commercial phase prior to completing financing and starting construction within the next several months.

The facility will also produce approximately 300 cubic yards per day of commercial grade digested solids with similar properties to peat moss and will be marketed for use as a high value, organic soil amendment. LRE does not currently have a contract for the sale of this high value product. However, we have extensive experience with marketing the product and have absolute confidence that the organic peat moss type product will find multiple markets in the region. Nonetheless, to the extent the organic soil amendment is not sold, it will be disposed of in accordance with the County's Solid Waste Management Plan.

The final product produced by the Project will be an organic liquid 6-0-0 fertilizer. The LRE Project has Executed a Letter of Intent with Biostar, a company specializing in the production, marketing and distribution of liquid organic fertilizer. BioStar will be owning and operating a portion of the Project that produces the organic fertilizer and distributing this high demand product to markets on the east coast. Nonetheless, to the extent the liquid organic fertilizer is not sold, it will be disposed of in accordance with the County's Solid Waste Management Plan.

#### F. Violation of Environmental Laws

| 1. Has the facility which is subject of this application, any owner or operator of the   |
|--|
| facility as set forth in item II.B.I, 3 or 4, or the owner of the proposed facility ever |
| been determined or alleged by the DEP to be in violation of any environmental laws or    |
| regulations which violation has or continues to threaten or impair the environment or    |
| the public health, safety or welfare?  |

| Yes |              |  |
|-----|--------------|--|
| No  | $\mathbf{X}$ |  |

2. If the answer to the foregoing question is affirmative, please identify any such action by stating the nature of the violation, the type of enforcement action initiated by DEP, and sufficient other information such as the docket number, etc. as will allow the Authority to obtain such other information from the DEP as it deems necessary.

N/A

# G. Application Fee

1. Is the facility which is the subject of this application a public facility (i.e. one that is owned by a division of New Jersey Government such as State, County or Municipal Government, County or Municipal Utilities Authorities, etc.)?

| Yes | $\mathbf{X}$ | No |
|-----|--------------|----|
|     |              |    |

No application fee will be charged for Public Facilities.

2. For non-public facilities the amount of the application fee which shall be enclosed is \$3,500.00

Check for \$3,500 is enclosed with this application.

# III. TECHNICAL INFORMATION

The following information shall be considered by the Authority only with regard to suitability for inclusion in the Solid Waste Management Plan. It is not the Authority's intention to perform a detailed review of specific information submitted. The Authority will use this information only to verify that the applicant has performed sufficient planning to merit inclusion of the facility in the Union County Solid Waste Management Plan.

#### A. Facility Design

1. Capacity

a. State the proposed facility's maximum design capacity.

# **1,400** Tons Per Day (**1,400 tons/day on average**)

b. State the number of operating hours per day that the above capacity was based on.

# 24 Hours 7 days/week

c. Indicate the days of the week and the hours of operation of the facility.

# The facility will be operated 24 hours/day, 7 days/week

d. List the source(s) and type (s) of materials to be processed at the proposed facility.

The facility will consist of an organic waste anaerobic digester project which will receive processed food waste and organic substrate slurry in order to produce renewable natural gas, as well as a liquid organic agricultural fertilizer and commercial grade digested solids, similar to peat/moss finished compost, for use as a soil amendment. See list of materials defined above in Section C. Material Received at Existing or to be Received at Proposed Facilities.

# 2. Operating Description

Attach a narrative description of facility operations addressing types of vehicles used and frequency of material deliveries, loading and unloading procedures, special handling requirements; traffic control procedures; delivery inspection procedures; a description of processing methods and equipment; and the provisions to handle peak loads and loads in excess of planned design capacity.

See Attachment #1, Sections 2.2 (Feedstock Receiving/Pre-Processing); 2.3 (Biowaste Processing); 2.4 (Biogas Processing); and, 2.10 (Site Security/Access Control/Fire Protection.

Trucks providing/delivering processed diverted organic waste to the LRE Facility will use US Route 1. From US Route 1, all trucks will turn onto S. Stiles St and travel approximately 0.65 miles and turn left on to W. 21st St. The trucks will then take a rights (east) onto South Wood Ave., and proceed for approximately 1.0 miles to Tremley Point Rd. It is important to note that from near the Linden Roselle Treatment plant, Tremley Point Rd is owned and maintained by a consortium of industry's served by the road. As an alternative, we show the Alternative B which simple has the trucks turning from US Route 1 onto South Wood Ave and then proceeding to Tremley Point Rd.

3. Describe all equipment to be utilized for the receipt, storage, processing or transfer of each material, including the name of the equipment manufacturer, model number and operating capacity. The manufacturer's, printed, equipment specifications will satisfy this requirement.

See Attachment #1 for a description of the Project (Section 1) and process (Section 2) as well as a preliminary site plan/general arrangement drawing showing the planned equipment (Figure 4).

Attachment #1 also describes the primary equipment vendors for the Project (Section 2). Suez Water Technologies will provide the major components of the anaerobic digester island. This will include the bioreactors, hydrolysis tanks, storage tanks, pasteurization systems, de-gritting systems, dewatering system, biogas holder and pumping apparatus. Air Liquide will be the vendor providing the Biogas Upgrading System, the gas compression systems and Paques Thiopaq system for sulfur management/H2S removal. The final model numbers and equipment specifications will be provided from our engineering, procurement and construction (EPC) provider, Phoenix Power Group, Inc.

4. Describe the methods and procedures that will be utilized to inspect incoming and outgoing materials to make sure that only materials which the facility is legally allowed to receive, store, process or transfer are in fact accepted at the facility and that all recyclables and residue are transported to legally permitted end users and points of disposal, as set forth in this application.

See Attachment #1, Section 2.10.1 for description of incoming materials inspection procedure and waste monitoring plan.

The facility will receive the organic substrate materials from tanker truck and eventually barge in a pre-processed emulsified state. As stated earlier, the raw organic substrate material and packaged organic substrate material will be processed in off-site de-packaging facilities by third parties under contract with LRE. Each de-packaging facility utilized by the Project shall be fully licensed and possess the requisite NJDEP permits/approvals necessary to conduct their operations. Moreover, to the extent that any third party de-packaging facility is located in Union County, it shall comply with the County's Solid Waste Management Plan.

The Project will have dedicated personnel that implement extensive testing/sampling procedures to ensure the purity and non-hazardous nature of the diverted organic waste. The de-packaging facilities are required to coordinate directly with Project personnel on the sources of the raw substrate and each source will have extensive testing/sampling completed before they are approved as a substrate provider. Periodic testing/sampling

will be conducted for each source throughout the year. The Project will not accept substrate from any source unless previously approved for receipt.

The delivery trucks (6,000 gallon capacity tank trucks) entering the facility will be weighed on one of two scales located along the northern side of the site near the entrance to the truck unloading building. The scales will be a low profile design with a concrete deck. An automated kiosk system will be provided at each scale to allow for product, product sourcing and load identification, load assignment and weighing. The kiosk will transmit this information to the Project's control system. Should a truckload of organic substrate be rejected at the facility for any reason, then the material shall be disposed of in accordance with Union County's Solid Waste Management Plan.

The anticipated barge unloading facilities and equipment will be located along the Arthur Kill adjacent to the proposed bulkhead. The barge offloading area will be sized to accommodate a single barge.

The barge unloading facilities will include: a barge substrate enclosure equipped with offloading pumps, liquid waste forwarding pumps and metering equipment, and a receiving AST/substrate storage tank.

Should either a truckload barge-load of organic substrate be rejected at the facility for any reason, then the material shall be disposed of in accordance with Union County's Solid Waste Management Plan.

The Project will have extensive lab facilities for testing of incoming materials/substrate with the testing protocol requiring multiple dozens of tests daily and constant monitoring and coordination with the operating staff. In addition, operating personnel will maintain daily contact with the de-packaging facilities and weekly contact with larger sources of diverted organic waste as part of a broader QA/QC program to assure substrate supply quality and efficacy.

5. Describe the methods that will be utilized to control odor and describe the methods and equipment that will be utilized to comply with applicable state and federal air pollution control laws.

See Attachment #1, Section 2.5 for description of odor controls. In summary, potential odors from the anaerobic digestion process will be controlled by the gas management system including the biogas holder. Potential odors from the other process enclosures and process tank head spaces will be controlled by radial carbon adsorbers. The carbon selection is based on the potential air stream contaminants and the carbon will be replaced when it is spent based on air sampling protocols and procedures.

The facility will comply with applicable state and federal air pollution control laws. Any potential odor sources will be contained within enclosures and tanks with covers and will be processed through one of the odor control systems before being vented to atmosphere. There are no open process tanks or enclosures where any potential odors could escape directly to the atmosphere.

The NJDEP will, as part of the review and approval of the LRE's air permit application, pay particular attention to potential odor sources; control equipment such as activated carbon systems; and compliance with NJDEP regulations and requirements.

6. Describe the methods that will be utilized to control noise in accordance with the requirements of the New Jersey Noise Control regulations.

RNG Energy and our Project design Team have implemented a design approach that will substantially mitigate noise issues. First, we have designed the site to receive trucks within building enclosures with once through designs requiring no backing up and corresponding back-up beacons. We have also included multiple redundant weigh scales and multiple truck unloading bays to accommodate fast tank truck discharges to minimize any truck idling. This multiple truck unloading is accomplished within a building enclosure. Our objective is to limit truck time and therefore idling time on our site. Second, all major mechanical systems are located within enclosures providing natural noise attenuation. Last, the facility will comply with all state and local noise regulations. The facility is located in a heavy Industrial area and the nearest noise receptor or residence is located over 4,000 feet away. Ongoing ship and barge traffic on the Arthur Kill River, heavy industrial activity all along Tremley Point Rd will all be noise sources defining a very high background noise level relative to the noise emissions from the LRE Project.

7. Describe the methods and procedures that will be used to control litter on site.

The Project receives all of its organic substrate material in enclosed tanker trucks or barges as a pre-processed material. There is no on-site processing or other preparation of the organic substrate material. This low solids liquid is pumped into on-site tanks. Therefore, there are no sources of litter or waste on the Project site. Normal good project controls will establish a clean and safe working environment free of any errant litter or outside, uncontrolled waste material.

8. Describe equipment, methods and procedures that will be employed to prevent and fight fires at the facility.

Fire prevention and firefighting methods and procedures include operator training, preventative measures and operating and maintenance control procedures as described below.

#### **Training**

All personnel in the facility will receive incipient fire training. This training will be conducted under the direction of a Certified Safety Professional; Certified NFPA Fire Instructor Level I & II, and will focus on prevention, detection and extinguishment, of incipient fires, complying with OSHA regulations. This course will be comprised of classroom and actual hands-on fire-fighting. Personnel utilize an excellent training manual to facilitate learning and are required to pass a written test. The course will also satisfy Fire Watch training requirements. In the hands-on fire-fighting training portion, personnel will use dry chemical and/or CO2 portable extinguishers, wheeled units, foam and water spray applications and will fight various class type fires in depth and with obstacles. Personnel will be trained on all plant fire equipment which consist of firewater hose stations, fire extinguishers, fire and smoke alarm systems.

#### Fire Prevention Measures

The prevention of fires is essential to the protection of employees and the facility. ABC Fire Extinguishers will be located at every landing of all Stair Towers. Additional fire extinguishers will be placed so no more than 75 feet of travel is required to get a fire extinguisher. Typical plant fire prevention operational measures include:

- Stacking combustible and non-combustible materials alternately in storage areas.
- Storing oxygen/acetylene and LP gas cylinders on racks away from sources of heat and ignition.
- Isolating flammable liquid and gas storage.
- Maintaining a clean worksite and keeping scrap materials picked up as work progresses.
- Cleaning all oil spills immediately.
- Providing covered containers for oily rags and other combustible shop waste.
- Following safe practices when welding and cutting.
- Using only approved solvents with flash points of at least 140 degrees.
- Turning off equipment before refueling.
- Enforcing "NO SMOKING" rules.
- Repairing or replacing damaged electrical cords.
- Labeling all containers in accordance with the hazard communication program.
- Disposing of trash and debris frequently so as to prevent accumulation.
- Properly ventilating interior, flammable liquid, storage areas.
- Using safety containers with a flame arrestor for dispensing flammable liquids.

**Operating and Maintenance Control Measures** 

Proper control measures must be taken to prevent or limit the damage caused by the fire. The following control measures must be maintained:

- All equipment will be equipped with an ABC cartridge type extinguisher.
- The number of fire extinguishers needed shall be determined by the area and arrangement of the building or occupancy, the severity of the fire hazard, anticipated classes of fires and the distance to be traveled to reach extinguishers.
- All service or fueling areas will be provided with at least one extinguisher of at least not less than 25' and not more than 75' from the fuel areas.
- All fire extinguishers will be inspected weekly to ensure operability of extinguisher and location.
- All hose stations will be inspected weekly to ensure operability.
- An evacuation plan will be developed, and evacuation drills will be conducted.
- Combustibles will be adequately protected when welding or cutting operations are in progress.
- Lock out procedures shall be followed for maintenance of equipment and electrical systems.
- Emergency fire pump will be tested weekly.

Specialized operations are examined in regard to prevention and protection from fires. The best fire insurance on the job is to remove fire hazards and properly inspect and maintain equipment. Each operating procedure will be reviewed to make sure all appropriate safety and fire preventive measures are being taken.

A formal permit system is used for welding, cutting and miscellaneous hot work. No hot work will be performed until a supervisor or other competent person determines that the operation can be safely performed at the desired location. Welding, cutting and brazing shall only be conducted in the following areas:

- Areas that have been made safe by either removing or protecting combustibles.
- Areas that have been specifically designed for welding, cutting, brazing, etc. These areas will be of non-combustible or fire-resistive construction, free of combustible and flammable contents, and separated from other areas.
- Areas authorized by management for such purposes.

Enclosed welding areas will contain an exhaust mechanism. Shields will be used, and fire watches posted as needed. A permit system is used for welding, cutting and miscellaneous hot work. No hot work will be performed

until a supervisor or other competent person determines that the operation can be safely performed at the desired location.

Special maintenance precautions and considerations include when cutting, welding or other hot work operations are to be performed near combustible walls, partitions, ceilings or roofs, fire resistive shielding will be used to prevent the possibility of fire.

When welding, cutting or other hot operations are to be performed on a metal wall, partition, ceiling or roof, precautions will be taken to prevent the ignition of combustibles on the other side by relocating the materials. Shift Supervisor approval is required for welding, cutting or other hot operations on metal walls, partitions, ceilings or roofs that have a combustible covering. Welding, cutting or other hot work will not be done in explosive or flammable atmospheres. Welding, cutting or other hot work will not be done near areas where large quantities of combustible or easily ignitable materials are stored or exposed.

# B. Evidence of Approvals

1. Please provide proof that the facility has obtained all necessary municipal site, construction code and soil erosion and sediment control approvals.

See Attachment #3 for a list of permits and approvals required to construct the facility. Upon LRE receipt of the permits and approval, copies will be provided to the UCUA as required.

2. Please provide a letter from the Mayor or Council of the host municipality indicating their support of the proposed facility.

See Attachment #4

#### C. Evidence of Markets for Recyclables

1. Please provide proof that the proposed facility has obtained markets for its recyclables (i.e., letters of intent or contract)

Below is a description of the anticipated product end markets. **Upon LRE receipt** of letters of intent or contract, copies will be provided to the UCUA.

#### Renewable Natural Gas

RNG produced at the facility will be sold to a number of potential buyers to be used for a number of end uses including vehicle transportation fuel via the USEPA RIN program or the European Union biomethane program, electric generation via the REC program and natural gas displacement via the voluntary and regulated sustainability programs.

# **Digested Solids**

Digested solids will be marketed to existing customers who use similar soil amendments/supplements directly or to customers who use the digested organic solids to make a blended soil amendment product such as Scotts Miracle Gro.

# Liquid Organic Fertilizer

The liquid organic fertilizer will be marketed by BioStar to existing organic farmers/growers customers directly and through existing distribution channels.

# Reclaimed Water

LRE is currently working with the LRSA to evaluate the feasibility of supplying reclaimed water produced at the facility to industrial users within the LRSA service area.

# IV. <u>SIGNATURE</u>

I certify that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete.

By: Linden Renewable Energy, LLC

(Name of Applicant)

Signature: (Signature of Applicants Authorized Representative)

Name: James S. Potter

(Print or Type Name of Authorized Representative)

Title: President, RNG Energy Solutions, LLC

Date: January 14<sup>th</sup>, 2020



# **Linden Renewable Energy Project Project Description**



# **Prepared for:**

Linden Renewable Energy, LLC 163 North Shore Road, Hampton, NH 03842

# Prepared by:

AKRF, Inc. 307 Fellowship Road, Suite 214 Mt. Laurel, NJ 08054

January 2020

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#### 1.0 INTRODUCTION

#### 1.1 PROJECT OVERVIEW

Linden Renewable Energy, LLC (LRE) is proposing to construct, own and operate the Linden Renewable Energy Project (LRE Project or Project). The Project will be located on 21.46 acres of an approximately 31.1 acre industrially zoned parcel (Lot 8, Block 587) located at 4900 Tremley Point Road in the City of Linden, Union County, NJ. The LRE Project is an organic waste anaerobic digester (AD) facility which will use food waste and other processed organic material to produce Renewable Natural Gas (RNG), a liquid organic agricultural fertilizer and commercial grade digested solids, similar to peat moss/finished compost, for use as a soil amendment.

A general site location map for the Project is shown in Figure 1. Figure 2 is an aerial photo of the proposed site and surrounding area. Figure 3 is a tax map of the proposed site and adjacent parcels indicating the current land use and zoning.

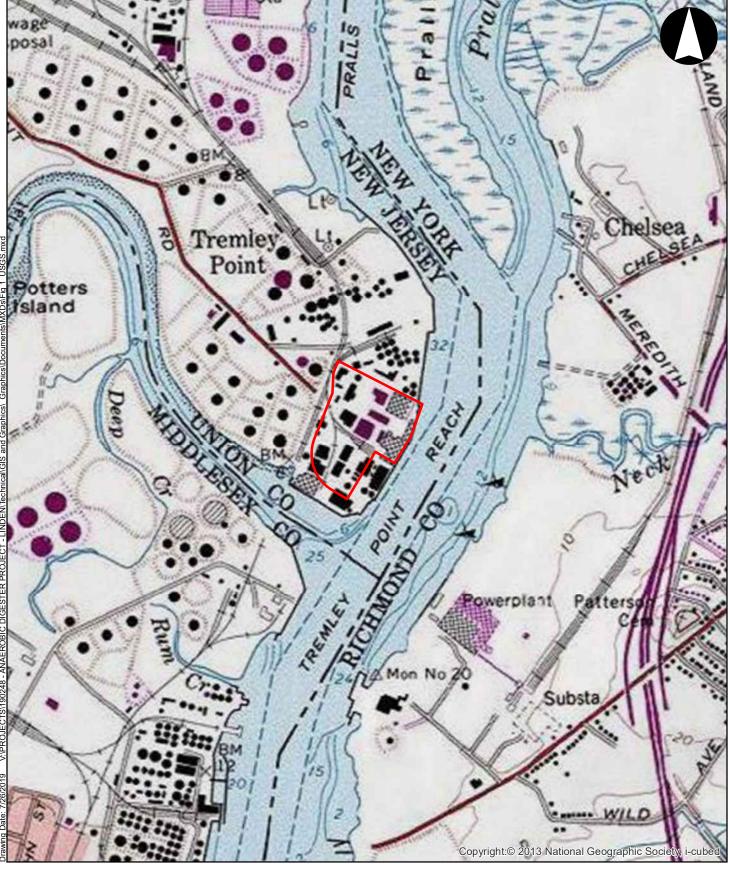
#### 1.2 DEVELOPMENT EXPERIENCE

LRE is a wholly owned subsidiary of RNG Energy Solutions, LLC (RNG Energy). RNG Energy specializes in the development, financing, operation and management of complex energy infrastructure and state-of-the-art anaerobic digester projects that produce RNG. As the successor company to AgEnergy USA, the RNG Energy Team brings three decades of conventional and alternative energy development experience in the agricultural, urban, and industrial environments.

The RNG Energy Team's experience includes development of natural gas Combustion Turbine and Combined Cycle Projects, Anaerobic Digester (AD) Projects, high BTU Landfill Gas Projects and Biomass Projects. Team experience also includes the provision of operational services and asset management of resource recovery facilities, hydro portfolios, and waste management projects.

The SUEZ Water Technologies and Solutions (SUEZ) anaerobic digester systems proposed for use are currently operating and processing similar waste streams at numerous sites, including: Cumbernauld, Scotland, March/ Cambridgeshire, England, Surrey, England, Bridgewater/Somerset, England, Halstead/Essex, England, Bristol, England and North Salt Lake City, Utah.

The biogas upgrading system (BUS) will be supplied by Air Liquide and Paques. Air Liquide is a worldwide gas separation technology provider with over 60 commercial biogas upgrading systems in operation. Paques is a worldwide H2S treatment system provider with over 200 installations.



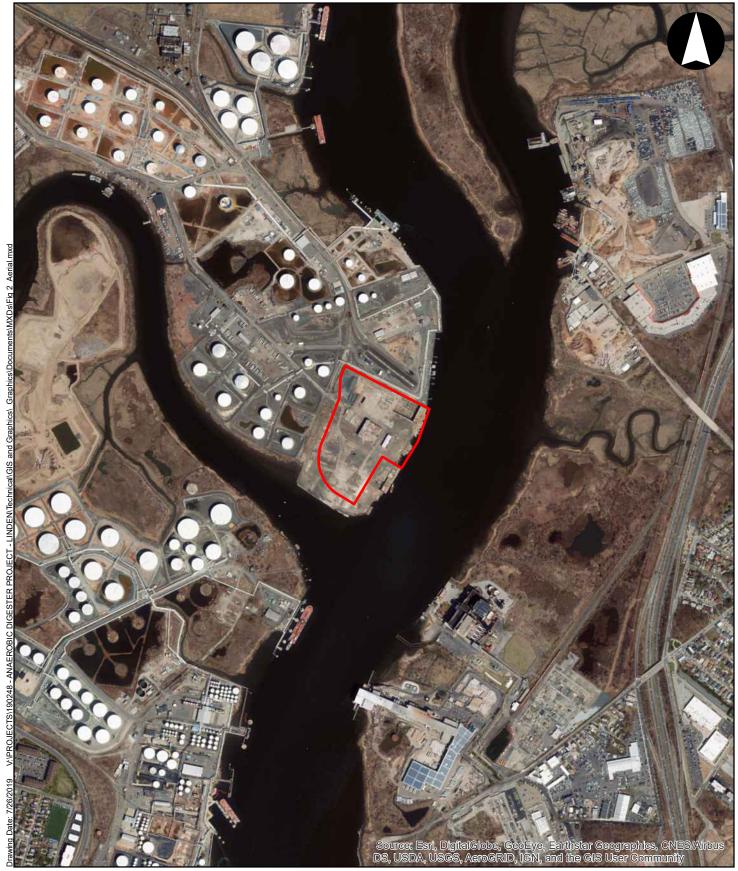
**CAK**RF

Legend

Project Boundary

Linden Renewable Energy, LLC Anaerobic Digester Project Linden, NJ

0 1,000 2,000 Feet





Legend

Project Boundary

Linden Renewable Energy, LLC Anaerobic Digester Project Linden, NJ

0 1,000 2,000 Feet



Project Boundary Forest Water

Tax Parcels Urban Wetlands

Note: According to the City of Linden Zoning Map, dated 2/21/2017, the entire surrounding area is Zoned HI (Heavy Industrial).

Figure 3 Tax Map

#### 1.3 SITE DESCRIPTION

The LRE site is located at the southern end of Tremley Point along the Arthur Kill near its confluence with the Rahway River. The parcel is bounded on the east by the Arthur Kill, on the north by Tremley Point Road and Citgo, on the west by Linden Marine and on the south by Kinder Morgan.

As illustrated in Figure 2, the planned Project will be developed on an approximately 21.46 acre parcel of a larger 31.15 acre parcel owned by Linden Marine, LLC (Linden Marine). The site, which was formerly owned by American Cyanamid, is located in a Heavy Industrial Zone at 4900 Tremley Point Road in the City of Linden, Union County, New Jersey. Linden Marine is the owner of 4900 Tremley Point Road defined as Block 587, Lot 8. LRE will seek a subdivision approval from the City of Linden and once approved, the Linden Marine property will have two separate uses. These are, LRE's use as defined herein and a proposed rail transloading operation. The site for the proposed rail transloading operation is approximately 9 acres and will provide for off-loading and loading liquid cargoes delivered and or received by rail and associated infrastructure.

LRE has executed a lease agreement with Linden Marine to develop the Project. Linden Marine is presently remediating the Site under the Industrial Site Recovery Act (ISRA) process pursuant to a Remedial Action Work Plan approved by the New Jersey Department of Environmental Protection (NJDEP). The LSRP for Linden Marine is Ms. Laura Brinckerhoff of Brinckerhoff Environmental Services, Inc. Site grades are currently being raised approximately 7 to 8 feet by Linden Marine with fill material tested and approved in accordance with an NJDEP Alternative Fill Protocol for the Site. The Site elevation process is nearly 80% complete and final completion is scheduled for the end of January 2020. This is the final element of the Site remediation program coordinated directly with the NJDEP.

# 1.4 GENERAL PROJECT DESCRIPTION/MAJOR PROJECT COMPONENTS

A general arrangement plan for the proposed facility is shown in Figure 4. Major components of the LRE facility include:

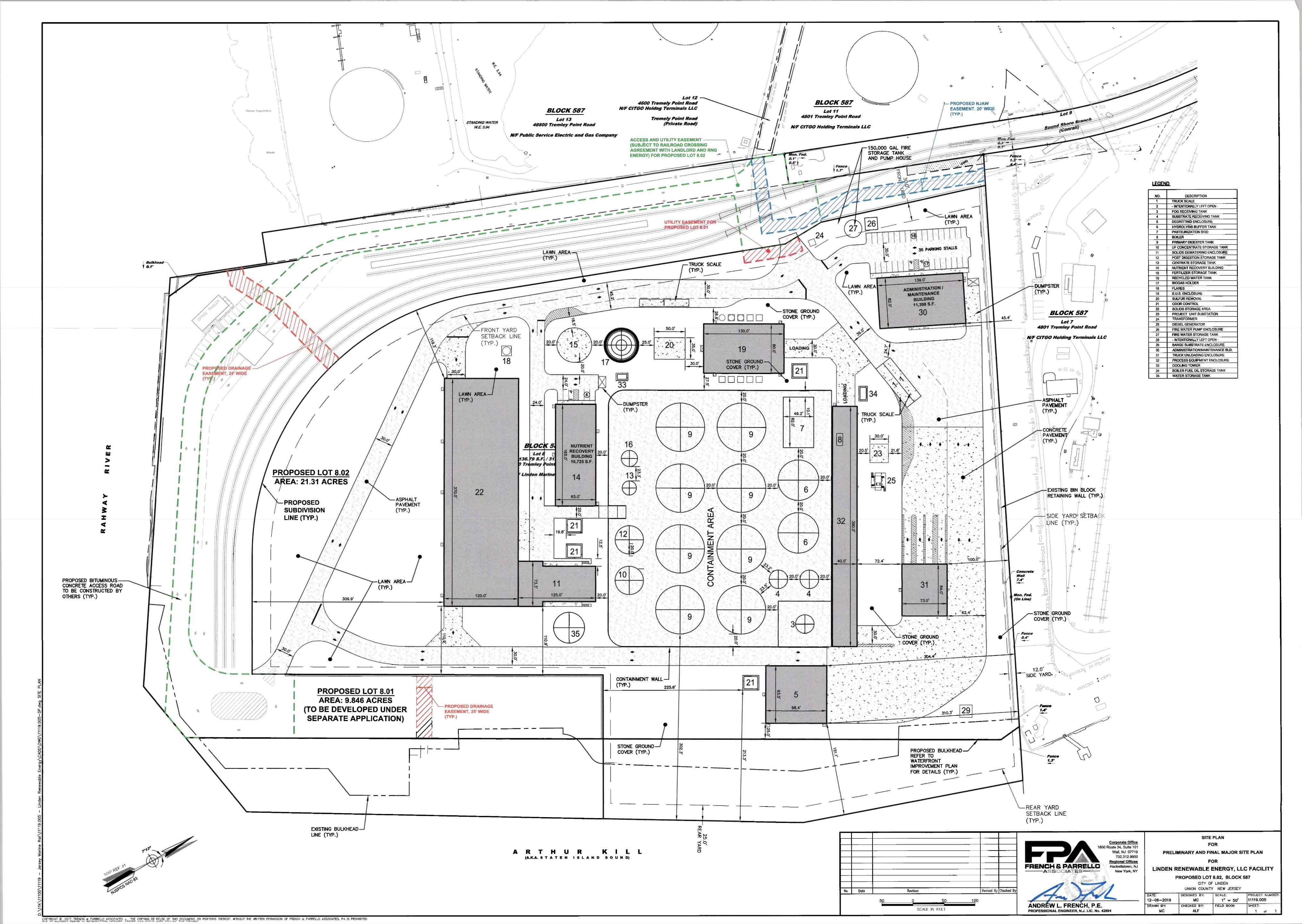
- An open-ended drive through unloading enclosure equipped with four truck unloading bays. This will allow for unloading of 70 to 80 tanker trucks within a 24-hour period using a fully integrated kiosk system.
- Multiple radial activated carbon adsorbers and gas management system with biogas holder for rigorous odor control.
- A degritting/hydrocyclone system to remove non-organic grit and sand from the organic waste feedstock prior to anaerobic digestion process.
- Two (2) Hydrolysis Tanks, each having approximately 960,000 gallons of storage providing a nominal 5-day storage capacity, which provide a uniform quality feed to the digesters and pre-digestion system.
- A Pasteurization System which will heat the feedstock to 158°F to meet the regulatory pathogen destruction requirements.

- Eight (8) approximately 1.43 MG Continuously Stirred Tank Reactors (CSTR's) designed to operate in the mesophilic temperature range (i.e., 90-110°F).
- A biogas upgrade system (BUS) consisting of a caustic scrubber hydrogen sulfide (H<sub>2</sub>S) removal system, activated carbon tanks, a three-stage membrane system for carbon dioxide (CO<sub>2</sub>) and oxygen (O<sub>2</sub>) removal and methane (CH<sub>4</sub>) enrichment and a tail gas metal oxide media polisher.
- A digested solids (DS) separation process, which will include redundant Centrifuge Units.
- A DS storage enclosure having an indoor storage capacity for managing up to 10,000 cubic yards of commercial compost products.
- Commercial organic fertilizer production by nutrient recovery of ammonia and nitrogen using a proven ultrafiltration and forward/reverse osmosis systems with mechanical vapor compression/evaporation and a polishing reverse osmosis system to produce a permeate of clean water for industrial reuse, river discharge and/or Linden Roselle Sewer Authority (LRSA) sewer discharge.
- Interconnections with sources for power, water, wastewater, RNG and stormwater.
- Two 100% capacity 400 HP natural gas fired boilers to provide process heat in the form of hot water for the substrate pasteurization process system and the bioreactors.
- One emergency enclosed ground flare.
- Barge unloading facilities/equipment allowing for substrate delivery via barge.

#### 1.5 ORGANIC WASTE SOURCES

The Project will be designed to process approximately 511,000 tons per year of diverted organic waste, including fats, oils, and grease (FOG). This represents an average daily processing rate of approximately 1,100 tons per day (TPD) of diverted organic waste and 300 TPD of FOG (equivalent to a combined 350,000 gallons per day (gpd)) of low solids organic waste. The facility will be capable of processing a variety of organic waste streams, including:

- Source separated food wastes from food markets, grocery stores, food distribution centers, food banks, schools, cafeterias, academic institutions etc.;
- Source separated organic waste from residences and residential buildings;
- Source separated organic waste from high occupancy hotels, sports or concert arenas, office buildings, etc.;
- Dewatered grease trap waste, FOG from restaurants or grocery stores;
- Dissolved Air Flotation (DAF) waste from food processing operations;
- Restaurant organic wastes including catering halls;
- Corrugated paper and cardboard, cardboard trays, serving systems;
- Food processing residuals;
- Agricultural wastes such as feed and feed supplements;
- Breweries, wineries and distilleries;
- Food manufacturing and Seafood product preparation wastes; and,



• Farm waste products.

#### 1.6 RENEWABLE NATURAL GAS PRODUCTION

LRE will use eight (8) 1.43 million gallon advanced anaerobic digesters (i.e., bioreactors) to convert the organic waste feed stock into RNG. Raw biomethane produced by the anaerobic digesters will be converted into pipeline quality gas via a BUS. The LRE Project will produce a total of approximately 3,085 dekatherms of RNG per day. This is the energy equivalent of 26,315 gallons of gasoline per day. The RNG produced by the LRE Project will be injected into the Spectra/TETCO interstate pipeline which is located less than a mile north of the site along Tremley Point Road or into an alternate gas pipeline. The majority of the RNG pipeline along Tremley Point Road is a privately owned road over which Linden Marine and LRE have control and use rights. The RNG pipeline and Spectra/TETCO proposed interconnection point is shown on Figure 5.

# 1.7 ORGANIC FERTILIZER PRODUCTION

The liquid digestate produced in the bio-reactors will total approximately 345,000 gpd excluding centrate recycled to the digesters. The digestate will be post-processed to produce a marketable liquid organic fertilizer and reclaimed water, as follows:

- The digestate will first be pumped from the bio-reactors, screened and then stored in the Post Digestion Storage Tank (PDST) used for flow equalization.
- From the PDST, the digestate is pumped to the nutrient recovery building where the digestate will be processed to make a commercial liquid organic 6-0-0 fertilizer and reclaimed clean water. The process consists of an ultrafiltration (UF) system, a two stage forward osmosis (FO)/reverse osmosis (RO) system and a mechanical vapor compression /evaporation system and a polishing RO system. The liquid fertilizer product will be stored in an above ground storage tank. The reclaimed clean water will be recycled back into the process, as needed, with excess flows going to offsite users and/or discharged to the Arthur Kill.
- The UF concentrate is pumped to the UF Concentrate Storage tank for flow equalization before being pumped to the digested solids processing enclosure, where centrifuges will be used to separate the solids fraction (digested solids) from the liquid fraction (i.e., centrate). The centrate is either then pumped back to the head end of the anaerobic digester system for reuse and recovery of available organic value and corresponding biogas production or recycled to the nutrient recovery system for the recovery of the remaining ammonia nitrogen.

#### 1.8 DIGESTED SOLIDS – SOIL AMENDMENT PRODUCTION

The facility is designed to produce approximately 300 - 340 cubic yards per day of commercial grade digested solids. The digested solids have properties similar to peat moss and will be marketed for use as a soil amendment. The facility is expected to maintain up to 10,000 cubic yards of covered on-site inventory at any given time (representing 30 days of production capacity). The soil amendment is planned to be sold as finished compost, which will include bulk sales to agro-products businesses. Digested

solids will be stored and managed inside the open ended covered finished compost building located adjacent to the digested solids separation enclosure.





# Legend

- Proposed Interconnection Path
- Spectra Pipeline
- Liquid Pipelines
- Project Boundary

Linden Renewable Energy, LLC Anaerobic Digester Project Linden, NJ

> Figure 5 RNG Interstate Gas Pipeline Interconnection Map

0 1,000 2,000 Feet

1 inch = 1,000 feet

#### 2.0 FACILITY DESCRIPTION

This section describes the AD process and the major components of the proposed facility. A diagram of the process flow is shown in Figure 6.

#### 2.1 BIOWASTE FEEDSTOCK

Biowaste has a wide range of constituents and parameters that determine its characteristics and treatability via anaerobic digestion. The proposed anaerobic digesters at the facility will use the SUEZ Biowaste Process. This process can treat a variety of household and commercial/industrial organic wastes including:

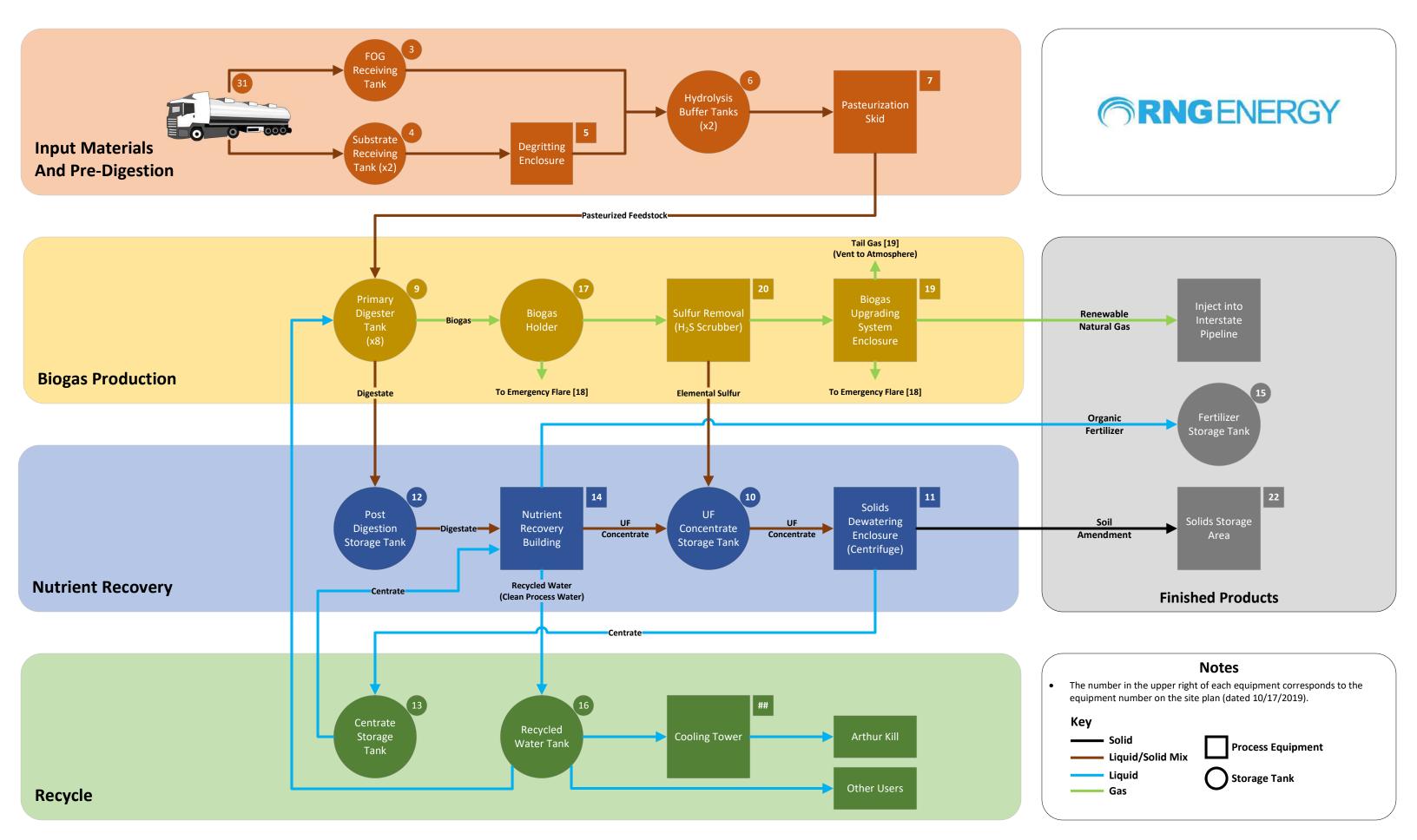
- Source separated organics and other foodwaste;
- liquid wastes (high and low solids); and
- FOG

The facility is designed to receive and treat biowaste streams 24-hours per day, 7 days per week. A preliminary design feedstock is presented below. The offsite processed materials will include, but will not be limited to:

- Source separated food wastes from food markets, grocery stores, food distribution centers, food banks, schools, cafeterias, academic institutions etc.;
- SSO waste from residences and residential buildings;
- Source separated organic waste from high occupancy hotels, sports or concert arenas, office buildings, etc.;
- Dewatered restaurant grease trap waste;
- FOG from restaurants or grocery stores;
- DAF waste from food processing operations;
- Restaurant organic wastes including catering halls;
- Corrugated paper and cardboard, cardboard trays, serving systems;
- Food processing residuals;
- Agricultural wastes such as feed and feed supplements;
- Breweries, wineries and distilleries;
- Food manufacturing and Seafood product preparation wastes; and
- Farm waste products.
- Feedstock for the facility will only be accepted from known and verifiable generators.

# 2.2 FEEDSTOCK RECEIVING/PRE-PROCESSING

The proposed SUEZ Biowaste system is designed to process an average of 350,000 gpd. The liquid substrate feedstock will be delivered to the plant via bulk liquid tanker trucks, with carrying capacities of 6,000 to 6,500 gallons, and/or via barge. The pre-processed substrate will be in a pumpable form containing approximately 14% solids.





#### 2.2.1. TANKER TRUCK CHECK IN

The delivery trucks entering the plant will be weighed on one of two scales. The dual weighing scales will be located along the northern side of the site near the entrance to the truck unloading enclosure. The scales will be a low-profile design with a concrete deck. An automated kiosk system will be provided at each scale to allow for product and load identification, load assignment and weighing. The kiosk will transmit this information to the Project's control system. (A separate weigh scale will be provided to accommodate trucks containing digested solids exiting the site.)

#### 2.2.2. BARGE CHECK IN

The barge unloading facilities and equipment are located along the Arthur Kill River adjacent to the proposed bulkhead. The barge offloading area will be sized to accommodate a single barge. The barge unloading facilities will include: a barge substrate enclosure equipped with offloading pumps, liquid waste forwarding pumps and metering equipment. The receiving substrate storage tanks located within the digester island area are sized to provide suitable and sufficient buffering capacity for the expected barge delivery schedule prior to transfer into the process. The substrate storage tank will include a high rate mixer (i.e., the SUEZ ADT pump mixing system) to eliminate settling.

The liquid waste will be pumped from the receiving substrate storage tanks to the hydrocyclone grit removal system.

#### 2.2.3. SUBSTRATE UNLOADING

After weighing, the tanker trucks will be directed to the open-ended truck unloading enclosure. The truck unloading enclosure is a drive-through insulated, pre-engineered or fabric coverall building with open ends.

The enclosure will be sized to accommodate four truck lanes with code required general lighting and ventilation. One unloading pump will be provided for each lane (4 pumps total). Tanker truck unloading is estimated to require about 15 to 20 minutes per truck (i.e., connection, pumping, and disconnection). The unloading area could handle up to 16 trucks per hour; however, LRE is evaluating a delivery scenario of no more than 11 trucks per hour during peak traffic periods. This layout maximizes discharge capacity while minimizing tanker truck wait time. As such, the projected delivery schedule of up to 80 truckloads per day can be realized.

The offloading pumps will be used to transfer the substrate into one of two 200,000 gallon above ground substrate storage tanks and one 50,000 or 100,000 gallon FOG tank: two for liquid biowastes and one for FOG. The receiving substrate storage tanks are sized to provide suitable and sufficient buffering and surge capacity for the expected tanker truck and barge delivery schedule prior to transfer into the process. Both substrate storage tanks include high rate mixers (i.e., the SUEZ ADT pump mixing system) to eliminate settling.

A dedicated tanker mounted discharge pump will facilitate FOG waste transfer into the FOG reception tank. The FOG reception tank will be insulated and its contents heated via

an external concentric tube type heat exchanger to prevent solidification / stratification of the fats, oils or grease.

Liquid FOG waste will be pumped from the FOG reception tank to one of two Hydrolysis Buffer Tanks for conditioning prior to anaerobic digestion. Liquid biowaste will be pumped to the Hydrocyclone Grit Removal System, which will be located in the degritting enclosure.

#### 2.2.4. HYDROCYCLONE GRIT REMOVAL

Liquid waste will first be pumped from the liquid waste reception tanks to the hydrocyclone grit removal system. The main components of the grit removal system are a segmented grit staging tank, a hydrocyclone with dedicated feed pump, and a grit washer and conveyor. The grit separation equipment is designed to separate and remove heavy matter or "grit" from the feed slurry. Removal of grit is beneficial from a processing perspective as it is abrasive and can prematurely wear mechanical equipment and piping located downstream in the digestion process. Additionally, grit does not settle efficiently in a high dry solids slurry following digestion, as the solids concentration drops due to volatilization of solids into biogas. Additionally, grit will become prone to settling in digestion tanks if it is not removed beforehand.

Following grit removal, the liquid feedstock is pumped to the Hydrolysis Buffer Tanks and blended with the FOG waste stream.

#### 2.2.5. HYDROLYSIS BUFFER TANKS

The hydrolysis buffer tanks are sized to provide approximately 5 days of feedstock storage capacity.

The hydrolysis buffer tanks serve a dual purpose. First, the large buffer tank capacity homogenizes the different feed stocks prior to digestion. This is essential as the digestion system prefers a consistent feed to operate effectively and avoid process instability caused by sudden changes in feed stock composition. The buffering capacity also allows for interruptions in the feedstock due to non-feeding/waste delivery over weekend operating periods as well as allowing for holiday interruptions, etc.

The second is to start the hydrolysis process. The Hydrolysis Buffer Tank is under anaerobic conditions, as such, there is a community of anaerobic bacteria that commence the hydrolysis and acidification phases of anaerobic digestion. This process is designed to improve process performance and optimize biogas production. Both these stages will contribute to a more stable biogas production rate and therefore more efficient use in the gas utilization system.

For this project, the hydrolysis buffer tanks will consist of two reactors that allow for recycled liquid to be used to maintain the proper solids content within each reactor. The hydrolysis buffer tanks will be mixed by a pump mixing system to prevent settlement. The tank head space will be connected to the biogas management system. Although there is no dedicated heat control for this step, the temperature carried forward is typically higher than ambient.

The hydrolysis buffer tanks are also fitted with a pressure and vacuum relief valve to protect the roof against excessively high or low pressures, which could occur under abnormal fault conditions. This is a safety device and should not operate under normal working conditions. In addition, the tank roof is fitted with a pressure relief plate.

All feed pipes discharge above the top slurry level so that the tank contents cannot be released into the environment in the event of a pipe failure / leak.

#### 2.2.6. PASTEURIZATION PROCESS

Prior to entering the anaerobic digesters, the feedstock will be heated in external heat exchangers located on the pasteurization skid. Heat will be provided to the process via high temperature hot water generated in one of two (2) 100% capacity 400 HP natural gas fired boilers. A pre-heater (i.e., heat exchanger) will first be used to raise the slurry temperature from approximately 86°F to 122°F by recovering heat from the exiting hot pasteurized sludge.

Pasteurization will take place in two (2) trains of three (3) parallel tanks. At any given time, one pasteurization tank will be filling and heating the slurry to 158°F via recirculation through a counter-flow shell and tube heat exchanger, which uses hot water as the heat transfer medium. The second tank will provide an approximately 30-minute retention/holding time at approximately 158°F, and the third tank will be emptying.

As indicated above, the hot pasteurized slurry will be pumped from the pasteurization process through a heat recovery exchanger (where the temperature is lowered to approximately 104°F to 122°F prior to entering the anaerobic digesters). The heat recovery exchanger will be equipped with detachable bends on the slurry side for ease of cleaning.

## 2.3 BIOWASTE PROCESSING

This section presents design assumptions and project specific design criteria for the AD components of the proposed facility.

## 2.3.1. ANAEROBIC DIGESTION PROCESS - OVERVIEW

LRE is proposing to install an advanced anaerobic digestion system developed by SUEZ for processing pre-treated slurried food waste, fats, oils and grease, and DAF wastes. The advanced anaerobic digestion system employs a compact design which delivers high conversion of solids to RNG. The SUEZ digestion equipment has been proven effective and efficient for the conversion of food wastes and other waste products into RNG on hundreds of installations, most notably in the United Kingdom (UK) for food waste projects.

The biogas generated through anaerobic digestion will be managed on site by the RNG system infrastructure to control biogas pressure and flowrate, so as to maintain stable digestion and biogas utilization. Biogas produced will then be upgraded to biomethane via a BUS. The BUS removes impurities from the biogas to meet the RNG quality requirements for distribution. After upgrading, the biomethane will be compressed to the required pressure for export to the interconnecting natural gas pipeline system.

The digestate discharged by the SUEZ anaerobic digestion tanks will be screened and will be directed to the BioStar nutrient recovery or organic fertilizer production system. The BioStar system consists of ultrafiltration, a two stage FO/RO system, a mechanical vapor compression/evaporation system and a polishing RO system. The digestate will be processed first through the ultra-filtration (UF) system where it will be separated into a concentrate and permeate. The concentrate is directed to a centrifuge that produces a digested solids cake suitable for use as a soil amendment. The centrate from the centrifuge is recycled back to the FO/RO system for additional ammonia recovery and/or to the anaerobic digesters. The permeate from the UF is directed to a two stage FO/RO system and a mechanical vapor compression/evaporation system with a polishing RO system. Following processing, the liquid fertilizer product will be stored in an above ground storage tank. The reclaimed clean water generated by the BioStar system (i.e., polished permeate) will be recycled back to the process, as needed, with excess flows available for beneficial reuse by offsite industrial users, or discharged to the LRSA and/or the Arthur Kill River.

## 2.3.2. SYSTEM MASS BALANCE

Table 2-1 summarizes the design plant mass and energy balance. The input material specifications are outlined in Table 2-2.

| Table 2-1: Plant and Energy Mass Balance (Average Day) |         |                |  |  |  |
|--|---------|----------------|--|--|--|
| Inputs   | Volume  | Units          |  |  |  |
| Pre & post-consumer food waste slurry                  | 270,000 | gallons/day    |  |  |  |
| Grease trap waste (grease)                             | 40,000  | gallons/day    |  |  |  |
| Grease trap waste (sludge)                             | 20,000  | gallons/day    |  |  |  |
| DAF waste  | 20,000  | gallons/day    |  |  |  |
| Internal Recirculation                                 | Volume  | Units          |  |  |  |
| Dilution water recycle                                 | 20,000  | gallons/day    |  |  |  |
| Outputs  | Volume  | Units          |  |  |  |
| Biogas @ 60% methane                                   | 3,571   | SCFM           |  |  |  |
| Biogas calorific value                                 | 3,085   | dekatherms/day |  |  |  |
| Digestate cake @ 28% dry solids                        | 200     | tons/day       |  |  |  |
| Plant effluent   | 281,000 | gallons/day    |  |  |  |

| Table 2-2: Input Material Specifications (Average Day) |               |             |  |  |  |
|--|---------------|-------------|--|--|--|
| Inputs   | Volume/Amount | Units       |  |  |  |
| Pre & post-consumer food waste slurry                  | 270,000       | gallons/day |  |  |  |
| Grease trap waste (grease)                             | 40,000        | gallons/day |  |  |  |
| Grease trap waste (sludge)                             | 20,000        | gallons/day |  |  |  |
| DAF waste  | 20,000        | gallons/day |  |  |  |
| C:N  | 10:1 to 50:1  | -           |  |  |  |
| TKN  | < 8           | gm/kg waste |  |  |  |
| Dry Matter (DM) content                                | 15            | %           |  |  |  |
| Volatile Solids (VS) content                           | 94            | % of DM     |  |  |  |
| Contamination  | 0             | % (w/w)     |  |  |  |
| Grit   | 0             | % (w/w)     |  |  |  |
| Sulfur   | < 0.9         | % of DM     |  |  |  |

| Potassium | < 2.5 | gm/kg waste |  |
|-----------|-------|-------------|--|
| Sodium    | < 3.5 | gm/kg waste |  |
| Calcium   | < 3   | gm/kg waste |  |

#### 2.3.3. ANAEROBIC DIGESTERS

This Project will utilize eight (8), 1,430,000 gallon continuously mixed, coated steel digesters (i.e., reaction vessels). The AD process utilizes a sequential gas mixing (SGM) system designed for thick slurry/sludge digestion. In essence, the digester contents are continuously mixed by recirculating a portion of the generated biogas. This provides for a high active volume (> 90%) for biogas production in each reaction vessel. Sequential gas mixing is the most effective and efficient system for completely mixing anaerobic digesters and does not require internal mechanical equipment that could be prone to 'ragging' up or mechanical failure requiring maintenance.

From a processing perspective, the pasteurized (i.e., heated) slurry will be pumped through heat exchangers to the anaerobic digesters by the digester feed pumps. The anaerobic digesters will be operated within the mesophilic temperature range between 90°F and 110°F. Reactor temperature will be maintained within the mesophilic temperature range by carrying forward the heated slurry from the pasteurization process.

In the digesters, micro-bacteria start the fermentation process and digest the organic material producing biogas. This is performed using a continuous process in which fresh pasteurized slurry is fed into the anaerobic digesters and fermented liquid is discharged via overflow. The digestion of organics occurs over the hydraulic retention time (HRT) of the digester, which is typically 17-25 days.

Digested slurry displaced by the pasteurized influent flow will discharge from the digester via a weir box that also functions as a siphon break, such that the digester cannot be drained in the event of a down-stream pipe fracture. The digested slurry will then flow under gravity to a post digestion storage tank.

#### 2.3.4. POST DIGESTION STORAGE TANK

The Post Digestion Storage Tank (PDST) will be constructed of coated steel and connected to the facility's odor control system. The PDST serves as a buffer tank for the downstream nutrient recovery/organic fertilizer production system.

## 2.4 BIOGAS PROCESSING

#### 2.4.1. BIOGAS HOLDER

Biogas generated in the anaerobic digesters will be stored in a biogas holder. The biogas holder is an external, ground mounted double skinned unit with a capacity of 200,000 cubic feet (ft<sup>3</sup>), which will operate at approximately 0.7 pounds per square inch (psi).

The biogas holder has multiple functions. It serves as a safety device, by providing a volume buffer for biogas produced in the digesters and hydrolysis tanks, and as a temporary storage buffer to maintain the anaerobic digestion process and downstream

biogas handling processes. For example, when biogas is produced within the digesters, the gas holder provides a storage volume for this gas, thereby preventing an increase in biogas pressure in the digesters or hydrolysis tanks. When liquid is pumped out of one of the tanks/reactors, the gas holder serves as a reservoir for biogas to replace the volume withdrawn to maintain system pressure. Finally, the gas holder acts as a buffer for downstream biogas upgrading and processing operations. For example, the BUS uses biogas at a fixed rate, whereas the biogas production rate can vary widely. As such, the biogas holder acts as a buffer to allow the upgrading system to operate at a constant rate with varying gas production. In essence, the biogas holder serves as a pressure regulating device for the overall gas system.

Proper pressure is maintained in the biogas holder using air, which is blown into an outside bag that surrounds the inner gasbag. The air outlet is restricted by a regulating valve to create a constant air pressure in the outer bag, which in turn pressurizes the gas to the same constant pressure.

By maintaining the biogas at a positive pressure at all times, oxygen (from air) is prevented from entering the processing systems, thereby eliminating the potential for an explosive mixture of methane and air (i.e., oxygen) from developing. In addition, the biogas holder will be fitted with both pressure and vacuum relief valves to protect the holder against excessively high or low pressures, which could occur under abnormal operating conditions. These are safety devices that would not operate under normal working conditions.

## 2.4.2. BIOGAS UPGRADING

Biogas generated during anaerobic digestion typically consists of primarily of methane (approximately 60%) on an as-received basis including saturated water, with the remainder primarily carbon dioxide. Other constituents include a small amount of nitrogen and oxygen and traces of hydrogen sulfide. In order to convert the raw biogas to biomethane, an upgrading process is necessary. The biogas upgrading system will be supplied as an integrated system.

#### 2.4.3. BIOGAS TREATMENT AND COMPRESSION

The Biogas will be treated to meet the interstate pipeline specifications. Biogas will be scrubbed, chilled, and compressed according to the FERC approved pipeline quality specifications. A Gas Chromatograph (GC) will be used to monitor CH<sub>4</sub>, CO<sub>2</sub>, H<sub>2</sub>S, O<sub>2</sub> and inerts in the product gas to ensure the upgraded gas complies with the FERC specifications. The GC monitoring system will also have the capability of polling the digester biogas generated. A Coriolis mass flow meter will be installed to continuously monitor the mass of product gas produced.

The biogas from the biogas holder is first processed through the Paques Thiopaq caustic scrubber/hydrogen sulfide (H<sub>2</sub>S) removal unit. A small blower is used to boost the inlet gas pressure sufficiently to push the gas through the caustic scrubber unit, where the H<sub>2</sub>S concentration in the biogas is reduced to 25 ppm or less. The caustic scrubber unit includes a biological caustic regeneration step in which the H<sub>2</sub>S is converted to elemental sulfur. This elemental sulfur slurry is recycled back to the AD system for reuse.

After H<sub>2</sub>S removal, the raw gas, plus a recycle stream, will be processed by an integrated Air Liquide system including compression in three electric drive screw compressors followed by a High Recovery Module (HRM), consisting of an additional, similar compressor, for an overall 99% methane recovery. The compressors are equipped with air-fan discharge cooling systems for the biomethane and lubricating oil. The discharge from the feed compressor is set at 200 psig for processing.

After compression and air fan cooling, the resulting gas passes through heat exchangers using a glycol-water thermal fluid for pre-chilling to approximately 55°F. To minimize the power required by the chiller, an inlet gas-gas economizer heat exchanger is also included. Subsequent to chilling, condensed water is routed to a coalescing filter separator for removal of condensed water and a portion of heavy VOCs (if present) that may condense. The chiller is located outside of the building in a non-hazardous area.

The chilled gas is then routed through two activated carbon beds operating in a lead-lag arrangement. The lead-lag arrangement is designed to permit the replacement of one media bed without a plant shutdown. The activated carbon beds adsorb and remove residual H<sub>2</sub>S not removed by the main caustic scrubber H<sub>2</sub>S removal system. The activated carbon beds are sized to remove H<sub>2</sub>S and would also remove trace VOCs.

After the activated carbon beds, the gas is routed to the three-stage membrane system skid where CO<sub>2</sub> and oxygen permeate through the hollow fiber membrane. This permeate stream is then compressed and routed to a high recovery compressor/module (HRM) where an enriched methane stream is produced and recycled to the main membrane first stage inlet. The HRM produces a reject stream, containing CO<sub>2</sub>, which is vented to the atmosphere.

The product from the membrane system is at about 150 psig and is compressed to 700 psig using electric drive two-stage reciprocating compressors. Since the tail gas will be vented, a final  $H_2S$  metal oxide media polisher bed is provided on the membrane system reject stream to remove  $H_2S$  to <1 ppm at the end of media life. Since this is an end-of-life point, normal  $H_2S$  levels are <1 ppm.

#### 2.4.4. ENCLOSED FLARE

While the primary utilization of the generated biogas will be upgrading to biomethane for pipeline injection, a suitably sized enclosed ground gas flare will be provided to flare the biogas flow generated, with a minimum of 10% surplus capacity. Typically, the biogas pressure is sufficient to provide enough pressure to maintain flow to the flare, however, a gas booster will be supplied with the flare to operate, as necessary.

## 2.5 ODOR CONTROL

An odor control system will be provided for the extraction and treatment of odors generated on site to the required concentration at the designated discharge monitoring point. The odor control units will be dedicated to the degritting (hydrocyclone) /feedstock enclosure and storage tanks, to the dewatering (centrifuge) enclosure and storage tanks, to the nutrient recovery building/enclosure and to the BUS enclosure. The location of the

units will allow for specific treatment of odorous air from different process steps along with an optimized site layout.

Air will be extracted from the enclosures by extraction fans and the extracted air will be sent to a radial activated carbon adsorber system with treated air delivered to an exhaust vent which is integral to the radial carbon adsorber tanks. The volume of air to be treated and the activated carbon selected will be based on the quality of air to be treated and the type of enclosure.

The extraction fans will be sized on the required air exchanges per hour for the various enclosures and the activated carbon volume and type will be designed accordingly. The foul air from the various point sources contains odorous compounds called Volatile Organic Compounds (VOC's). These are anticipated to be comprised primarily of dimethyl sulfide, dimethyl disulfide, and mercaptans, with trace levels of alcohols, ketones, organic acids, esters and ammonia with the specific compounds and levels dependent on the enclosure and the tank head space. The treatment of the odor is a chemical process in which the foul air passes through activated carbon where the carbon removes the pollutants. Once the carbon is spent, it is replaced with new carbon. This material is non-hazardous and will be disposed of in landfills with no special handling requirements in accordance with Union County's Solid Waste Management Plan.

The overriding design principle is that any potential odor sources are contained within enclosures and tanks with covers. There are no open process tanks or enclosures where any potential odors could escape directly to atmosphere.

A breakdown of the odor control components for processing equipment throughout the facility is provided below with the number refers to the legend of Figure 4:

# Truck Unloading Enclosure (No. 31)

- All organic feedstock/wastes will be received by enclosed tanker trucks which will unload within an open-ended enclosure building.
- Organic feedstock will be pumped directly from the trucks to the Liquid Waste Storage Tanks (Nos. 3, 4 and 4).
- Operating procedures are in place to avoid any spillage; however, any feedstock that is inadvertently dripped during the unloading process will be collected for offsite disposal via the process wastewater collection system.

## Substrate and FOG Receiving Storage Tanks (Nos. 3, 4 and 4)

- The head space of these storage tanks will be connected to the Degritting/ Hydrocyclone Enclosure Activated Carbon Odor Adsorber Control System (No. 21).
- There will be no open tank vents to atmosphere.

## Degritting/Hydrocyclone Enclosure (No. 5)

- This enclosure is where the degritting of the organic feedstock is performed.
- The Odor Control System will consist of an air extraction fan and an carbon adsorber system (No. 21).

• The Odor Control System will be sized to include any gas from the head space of the Liquid Waste and FOG Storage Tanks (Nos. 3, 4 and 4).

## Hydrolysis Buffer Tanks (No. 6)

- The head space of these tanks is connected to the Biogas Management System which includes the Biogas Holder (No. 17).
- There will be no open tank vents to atmosphere.

## Pasteurization Skid (No. 7)

- The head space of these tanks is connected to the Biogas Management System which includes the Biogas Holder (No. 17).
- There will be no open tank vents to atmosphere.

## Primary Anaerobic Digester Tanks (No. 9)

- The head space of these tanks is connected to the Biogas Management System which includes the Biogas Holder (No. 17).
- There will be no open tank vents to atmosphere.

# Sulfur Removal Caustic H<sub>2</sub>S Scrubber (No. 20)

- The Scrubber is designed to remove 99% of the H<sub>2</sub>S in the raw biogas with H<sub>2</sub>S being the gaseous odor compound.
- The Scrubber converts the gaseous H<sub>2</sub>S into a liquid slurry of elemental sulfur which is not a nuisance odor source. The liquid elemental sulfur slurry is recycled to the AD system.
- The vent gas from the Aerobic Reactor will be connected to the BUS Tail Gas Metal Oxide Media Polisher which is part of the BUS (No. 19).

## BUS Enclosure and Biogas Activated Carbon Tanks (No. 19)

- The remaining H<sub>2</sub>S in the biogas is removed in activated carbon tanks as part of the Biogas Upgrading System (BUS) (No. 19).
- The H<sub>2</sub>S is captured by the activated carbon and when the carbon is fully spent it is removed and replaced with new carbon.
- The Enclosure odor control system will include an air extraction fan and an activated carbon adsorber system.

#### BUS Tail Gas Metal Oxide Media (No.19)

- The tail or vent gas from the BUS and the Caustic H<sub>2</sub>S Scrubber will pass through a metal oxide media bed polisher for final odor control processing before the tail gas is discharged directly to the atmosphere.
- The metal oxide media is replaced with new media when the bed is spent.

## Post Digestion Storage Tank (No. 12)

• The digestate from the anaerobic digesters are stored in this tank prior to being pumped to the Nutrient Recovery Building (No. 14).

- The head space of this tank is connected to the Dewatering/Centrifuge Enclosure Activated Carbon Adsorber Odor Control System (No. 21).
- There will be no open tank vents to atmosphere.

## UF Concentrate Storage Tank (No. 10)

- The UF concentrate from the Nutrient Recovery Building (No. 14) is stored in this tank prior to being pumped to the Dewatering Enclosure (No. 11).
- The head space of this tank is connected to the Dewatering Enclosure Activated Carbon Adsorber Odor Control System (No. 21).
- There will be no open tank vents to atmosphere.

# Solids Dewatering/Centrifuge Enclosure (No. 11)

- The UF concentrate is pumped to the Dewatering Enclosure to separate the Digested Solids from the nutrient rich water.
- The Odor Control System includes an air extraction fan and an activated carbon adsorber system (No. 21).

## Digested Solids Storage Enclosure (No. 22)

- The final Digested Solids from the Dewatering Enclosure is a finished product that does not emit nuisance odors.
- The Digested Solids are stored in an open-ended enclosure building for weather protection before the material is removed from the site by truck.

# Nutrient Recovery Building (No. 14)

- The digestate from the Post Digestion Storage Tank (No. 12) is pumped to the Nutrient Recovery Building where the concentrated nutrient ammonia rich fertilizer is produced and stored in an enclosed storage tank.
- There will be minimal ammonia gas odors because the process is a closed system
  and the ammonia remains in the liquid organic fertilizer product which is stored in
  enclosed tanks and removed by tanker trucks.
- As required, the Odor Control System includes an air extraction fan and an activated carbon adsorber system (No. 21) which is located between the Digested Solids Enclosure and the Nutrient Recovery Building.
- The clean water is recycled in the AD process and is reused in various off-site industrial processes.

## Centrate Storage Tank (No. 13)

- The centrate water from the Dewatering Enclosure (No. 11) is pumped to this tank prior to being recycled to the AD system.
- The head space of this tank is connected to the Dewatering Enclosure Activated Carbon Adsorber Odor Control System (No. 21).
- There will be no open tank vents to atmosphere.

## 2.6 NATURAL GAS BOILER

In order to produce the required thermal energy for the anaerobic digestion process, two 100% capacity natural gas fired boilers with a 400 HP rating each will be installed.

#### 2.7 EMERGENCY GENERATOR

The facility will be equipped with an emergency diesel generator to maintain power to critical systems and components in the event of a power outage.

## 2.8 PRODUCT END MARKETS

#### 2.8.1. RENEWABLE NATURAL GAS

RNG produced at the facility will be sold to a number of potential buyers to be used for a number of end uses including vehicle transportation fuel via the USEPA RIN program or the European Union biomethane program, electric generation via the REC program and natural gas displacement via the voluntary and regulated sustainability programs.

## 2.8.2. DIGESTED SOLIDS

Digested solids will be marketed to existing customers who use similar soil amendments/supplements directly or to customers who use the digested solids to make a blended soil amendment product such as Scotts Miracle Gro.

## 2.8.3. LIQUID ORGANIC FERTILIZER

The liquid organic fertilizer will be marketed by BioStar to existing organic farmers/growers customers directly and through existing distribution channels.

## 2.8.4. RECLAIMED WATER

LRE is currently working with the LRSA to evaluate the feasibility of supplying reclaimed water produced at the facility to industrial users within the LRSA service area.

## 2.9 RESIDUALS MANAGEMENT

#### 2.9.1. CLEAN PROCESS WASTEWATER

Clean process wastewater (i.e., reclaimed water), which is not reused on-site, will be discharged to the Arthur Kill River or marketed for reuse to industrial users located on Tremley Point.

#### 2.9.2. GRIT

Grit and screenings generated at the facility will be hauled for offsite disposal at the local landfill.

#### 2.9.3. SANITARY/PROCESS WASTEWATER

Sanitary and process wastewater generated at the facility will be discharged to the LRSA collection system for treatment at the Linden Roselle Wastewater Treatment Facility.

LRE has submitted a sewer discharge permit application to the LRSA, which is currently under review.

# 2.10 SITE SECURITY/ACCESS CONTROL/FIRE PROTECTION

Access to the Project Site will be restricted to LRE personnel, authorized construction contractor crews, suppliers/vendors and substrate delivery personnel. Unauthorized persons will not be allowed on the Project Site. The Project will be surrounded with a chain link security fence. Access to and from the Facility will be controlled at the entrance security gate.

During construction, the Project will utilize a site as a temporary laydown area located along Tremley Point Road for delivery and temporary storage of materials, craft labor parking and temporary construction support trailers. No additional security will be provided for the construction laydown area.

During operation, the Facility will be staffed, monitored and operated 24 hours per day, 7 days per week, 365 days per year. Access to and from the Facility will be controlled using an electronic gate and only authorized persons will be allowed access.

#### 2.10.1. TRUCK ROUTING

Trucks providing/delivering processed diverted organic waste to the LRE Facility will use US Route 1 (see Figure 7). From US 1, all trucks will turn onto S Stiles St and travel approximately 0.65 miles and turn left onto W 21st St (see Figure 5). The trucks will then take a rights (east) onto South Wood Ave., and proceed for approximately 1.0 miles to Tremley Point Rd. Near the Linden Roselle Treatment plant, Tremley Point Rd is owned and maintained by a consortium of industry's served by the road. Alternatively, (Alterative Route B) the trucks can turn from US Route 1 onto South Wood Ave and then proceeding to Tremley Point Rd.

# 2.10.2. INCOMING MATERIALS INSPECTION/WASTE MONITORING PLAN

This section provides a description of the incoming materials inspection plan detailing the manner by which all vehicles entering the facility with recyclable materials to be stored, processed or transferred will be inspected to determine the contents of the vehicle payload area, including the incidence of or extent of contaminants which may be present in the truckload of recyclable materials received.

Only allowable source separated organic wastes from known/approved sources will be accepted at the LRE Facility.

#### A. INCOMING MATERIALS SPECIFICATION SHEET

An incoming materials specification sheet will be provided to all persons bringing, delivering or sending Class C recyclable material to the LRE Facility, which will include the following information:

- A listing of the source separated materials to be received by the LRE Facility;
- The size, weight, or other restrictions regarding materials to be received;





# Legend

Linden Renewable Energy, LLC Anaerobic Digester Project Linden, NJ

Truck Route Alternate B

Truck Route Alternate A

□ Project Boundary

0 2,000 4,000 Feet

Figure 7
Truck Routing Map

- A notice that vehicles delivering materials to the LRE Facility will be inspected and, if found to contain more than allowable amounts of contaminants as specified per N.J.A.C. 7:26A-3.5(e)3i, will be barred from offloading the vehicle payload; and
- A notice that persons bringing materials to the LRE Facility must certify the amount of material per load, the municipality of origin of that material, and other information contained on the Recyclable Materials Receipt Form.

#### B. RECYCLABLE MATERIALS RECEIPT FORM

A Recyclable Materials Receipt Form will be provided to all persons bringing recyclable material to the LRE Facility. Prior to waste acceptance at the facility, the person bringing recyclable material will be required to provide the following information for each delivery/payload:

- The amount of source separated recyclable material received, expressed in tons, cubic yards, cubic feet or gallons. Those persons specifying this information in cubic yards must also indicate the conversion ratio of the materials from cubic yards to tons;
- The municipality of origin of the material received;
- The name of the person bringing source separated recyclable materials to the facility;
- The vehicle license plate number, NJDEP registration number, if an NJDEP registered vehicle is used, and EPA ID number, if an EPA registered vehicle is used; and,
- A certification, to be completed and signed by the person delivering recyclable material to the LRE Facility at the time of delivery, that the information contained on the Recyclable Materials Receipt Form is true, accurate and complete.

#### 2.10.3. CONTINGENCY OPERATIONS PLAN

A contingency operations plan will be developed during the construction phase of the project once all the equipment has been selected, operating permits have been obtained, the operation and maintenance plan has been established, facility HAZOP analysis has been completed and all major feedstock supply and product sales contracts are in place.

# 2.10.4. FIRE PROTECTION AND CONTROL PROCEDURES

The LRE Facility will be equipped with an internal fire loop and operating procedures consistent with good industry practice and local fire department requirements.

Fire prevention and firefighting methods and procedures include operator training, preventative measures and operating and maintenance control procedures as described below.

#### A. TRAINING

All personnel in the facility will receive incipient fire training. This training will be conducted under the direction of a Certified Safety Professional; Certified NFPA Fire

Instructor Level I & II, and will focus on prevention, detection and extinguishment, of incipient fires, complying with OSHA regulations. This course will be comprised of classroom and actual hands-on fire-fighting. Personnel utilize an excellent training manual to facilitate learning and are required to pass a written test. The course will also satisfy Fire Watch training requirements. In the hands-on fire-fighting training portion, personnel will use dry chemical and/or CO2 portable extinguishers, wheeled units, foam and water spray applications and will fight various class type fires in depth and with obstacles. Personnel will be trained on all plant fire equipment which consist of firewater hose stations, fire extinguishers, fire and smoke alarm systems.

## B. FIRE PREVENTION MEASURES

The prevention of fires is essential to the protection of employees and the facility. ABC Fire Extinguishers will be located at every landing of all Stair Towers. Additional fire extinguishers will be placed so no more than 75 feet of travel is required to get a fire extinguisher. Typical plant fire prevention operational measures include:

- Stacking combustible and non-combustible materials alternately in storage areas.
- Storing oxygen/acetylene and LP gas cylinders on racks away from sources of heat and ignition.
- Isolating flammable liquid and gas storage.
- Maintaining a clean worksite and keeping scrap materials picked up as work progresses.
- Cleaning all oil spills immediately.
- Providing covered containers for oily rags and other combustible shop waste.
- Following safe practices when welding and cutting.
- Using only approved solvents with flash points of at least 140 degrees.
- Turning off equipment before refueling.
- Enforcing "NO SMOKING" rules.
- Repairing or replacing damaged electrical cords.
- Labeling all containers in accordance with the hazard communication program.
- Disposing of trash and debris frequently so as to prevent accumulation.
- Properly ventilating interior, flammable liquid, storage areas.
- Using safety containers with a flame arrestor for dispensing flammable liquids.

#### C. OPERATING AND MAINTENANCE CONTROL MEASURES.

Proper control measures must be taken to prevent or limit the damage caused by the fire. The following control measures must be maintained:

- All equipment will be equipped with an ABC cartridge type extinguisher.
- The number of fire extinguishers needed shall be determined by the area and arrangement of the building or occupancy, the severity of the fire hazard, anticipated classes of fires and the distance to be traveled to reach extinguishers.
- All service or fueling areas will be provided with at least one extinguisher of at least not less than 25' and not more than 75' from the fuel areas.

- All fire extinguishers will be inspected weekly to ensure operability of extinguisher and location.
- All hose stations will be inspected weekly to ensure operability.
- An evacuation plan will be developed, and evacuation drills will be conducted.
- Combustibles will be adequately protected when welding or cutting operations are in progress.
- Lock out procedures shall be followed for maintenance of equipment and electrical systems.
- Emergency fire pump will be tested weekly.

Specialized operations are examined in regard to prevention and protection from fires. The best fire insurance on the job is to remove fire hazards and properly inspect and maintain equipment. Each operating procedure will be reviewed to make sure all appropriate safety and fire preventive measures are being taken.

A formal permit system is used for welding, cutting and miscellaneous hot work. No hot work will be performed until a supervisor or other competent person determines that the operation can be safely performed at the desired location. Welding, cutting and brazing shall only be conducted in the following areas:

- Areas that have been made safe by either removing or protecting combustibles.
- Areas that have been specifically designed for welding, cutting, brazing, etc. These areas will be of non-combustible or fire-resistive construction, free of combustible and flammable contents, and separated from other areas.
- Areas authorized by management for such purposes.

Enclosed welding areas will contain an exhaust mechanism. Shields will be used, and fire watches posted as needed. A permit system is used for welding, cutting and miscellaneous hot work. No hot work will be performed until a supervisor or other competent person determines that the operation can be safely performed at the desired location.

Special maintenance precautions and considerations include when cutting, welding or other hot work operations are to be performed near combustible walls, partitions, ceilings or roofs, fire resistive shielding will be used to prevent the possibility of fire.

When welding, cutting or other hot operations are to be performed on a metal wall, partition, ceiling or roof, precautions will be taken to prevent the ignition of combustibles on the other side by relocating the materials.

Shift Supervisor approval is required for welding, cutting or other hot operations on metal walls, partitions, ceilings or roofs that have a combustible covering. Welding, cutting or other hot work will not be done in explosive or flammable atmospheres. Welding, cutting or other hot work will not be done near areas where large quantities of combustible or easily ignitable materials are stored or exposed.

#### 2.10.5. REQUIRED SIGNAGE

The LRE Facility will post and maintain legible signage, at or near the entrance to the Facility, indicating that it is an approved NJDEP recycling center. In addition, the sign will also indicate:

- Hours of operation of the recycling center;
- A listing of the source separated materials to be received by the recycling center;
- The size, weight, or other restrictions regarding materials to be received; and
- A notice that vehicles delivering materials to the recycling center will be inspected and, if found to contain more than allowable amounts of contaminants as specified per N.J.A.C. 7:26A-3.5(e)3i, will be barred from offloading vehicle payload; and
- A notice that persons bringing materials to the recycling center shall certify the amount of material per load, the municipality of origin of that material, and other information contained on the Recyclable Materials Receipt Form.



# LINDEN MARINE, LLC – 1355 Campus Parkway, Wall NJ 07753

To Whom It May Concern:

Re: Linden Renewable Energy, LLC Project

4900 Tremley Point Road

Linden, New Jersey

Linden Renewable Energy, LLC has executed a lease agreement with Linden Marine, LLC (the Property Owner) to construct and operate an approximately 1,400 ton per day anaerobic digester project on approximately 21.46 acres of land within a larger 31+ acre parcel located at 4900 Tremley Point Road in the City of Linden, Union County, NJ. Linden Marine, LLC is aware of and consents to Linden Renewable Energy, LLC to proceed with the preparation and submittal of various permit applications to allow for the development of the anaerobic digester facility in accordance with the executed lease agreement.

Please be advised that I represent the owner of record of the property (Linden Marine, LLC) and I hereby consent to the submittal of this application by Linden Renewable Energy, LLC. Further, the owner of record also authorizes employees of the City of Linden, the New Jersey Department of Environmental Protection and other regulatory parties to which an application for the project will be submitted to enter and inspect the project site during normal business hours, as necessary, with advance notice.

Thank you for your time and cooperation in this matter. Should you have any questions or need to speak further relative to this consent letter, please feel free to call me.

Sincerely,

J. Gordon Milnes, P.E., P.P., CME

Linden Marine, LLC
Director of Engineering and Planning
732-751-7605
gmilnes@claytonsonline.com

#### LAND LEASE AGREEMENT

THIS LAND LEASE AGREEMENT ("Lease") is made effective the 1st day of June, 2018 (the "Effective Date") by and between LINDEN MARINE, L.L.C., a New Jersey limited liability company with an address at P.O. Box 3015, Lakewood, New Jersey ("Landlord") and RNG ENERGY SOLUTIONS, LLC, a New Hampshire limited liability company, with an address at 163 North Shore Road, Hampton, NH 03842 ("Tenant"). Landlord or Tenant are also sometimes hereinafter referred to individually as a "Party" or, collectively, as the "Parties".

Landlord and Tenant, each intending to be legally bound, agree as follows:

## 1. LEASED PREMISES.

- Landlord is the owner of that certain property with the improvements (if any) thereon located in the City of Linden, County of Union and State of New Jersey, being commonly known Block 587, Lot 8, on the Official Tax Map of the City of Linden, New Jersey, 4900 Tremley Point Road, Linden, New Jersey and consisting of approximately 31.5 acres, as more particularly described on Exhibit A-1, attached hereto and made a part hereof (the "Property"). Landlord demises and leases to Tenant, and Tenant leases from Landlord, a portion of the Property which portion shall be not less than 21 acres and substantially similar to the area and location of the premises described in the concept plan set forth in Exhibit A-2, attached hereto and made a part hereof, including any right, title and interest of Landlord in and to any land lying in the bed of any street, docks and bulkheads and in all strips, gores or rights-of-way, riparian rights (currently and hereafter granted, licenses and easements benefiting the property, and any rights, powers, privileges and appurtenances in any way pertaining thereto, including the non-exclusive use of the Access Roads as defined in Section 8(d) (the "Leased Premises"), which the Parties intend to subdivide from the Property pursuant to Section 1(d) of this Lease, and (b) Tenant, at its sole expense, shall cause such precise area and location to be plotted by a reputable, licensed surveyor of Tenant's choosing. Upon completion of the foregoing legal description, (i) the same shall be deemed to be the "Leased Premises" for purposes of this Lease, and (ii) the Parties shall cause the same to be attached hereto and incorporated herein as Exhibit A-3. Landlord acknowledges that, as of the Effective Date, a portion of the Leased Premises is subject to title claims of the State of New Jersey for those portions of the Leased Premises formerly flowed by tidewaters. Landlord shall, at its sole cost and expense, satisfy any and all claims of the State of New Jersey related to such tidelands. Notwithstanding anything to the contrary set forth in this Lease, if the Landlord has not caused any exception to title relating to tidelands or other riparian claims at the Property (the "State's Tidelands Claims") to be discharged or has not obtained a statement of no interest or similar determination from the State of New Jersey regarding any and all State's Tidelands Claims such that title to the Property shall be free and clear of any exceptions to title for State's Tidelands Claims, as reasonably determined by a national title insurance company licensed to do business in the State of New Jersey, the obligation of the Tenant to make the payments to the Landlord described in Section 5(a)(i) hereof and the Rent Commencement Date shall each be tolled until such statement of no interest or discharge is obtained. Landlord represents and warrants to Tenant that on or about December 5, 2017, Landlord submitted to the State of New Jersey, Department of Environmental Protection, Bureau of Tidelands Management, an application for the issuance of a "Statement of No Interest" for the Leased Premises.
- (b) The lease of the Leased Premises shall include the following rights and for the following purposes:

- (i) The exclusive right for the development, erection, installation, construction, improvement, interconnection, reconstruction, enlargement, removal, relocation, replacement and repowering, and the use, maintenance, repair and operation of an anaerobic digester biogas facility for the production of electrical energy, biogas, biomethane or renewable natural gas and solid/liquid fertilizer by-products from the anaerobic digestion of organic materials, at the Leased Premises and all other associated improvements, structures, facilities, systems and equipment relating solely to such facility, including, but not limited to, (i) underground and/or overhead distribution, gas collection and transmission lines, (ii) underground and/or overhead control, communications and radio relay systems and telecommunications equipment, (iii) interconnection and/or switching facilities, circuit breakers, transformers, (iv) cables, wires, fiber, conduit, footings, foundations, towers, poles, crossarms, guy lines and anchors, and any related or associated improvements, fixtures, facilities, appliances, machinery and equipment to grant access to third parties for gas transmission access, (v) marine unloading of organic substrates, and (vi) Tenant shall have exclusive use of barge/marine access in the Leased Premises (collectively, the "Anaerobic Digester Biogas Facility" or "Tenant's Use").
- (ii) Removing, trimming, pruning, topping or otherwise controlling the growth of any tree, shrub, plant or other vegetation on the Leased Premises that could obstruct, interfere with or impair the use of the Leased Premises intended by Tenant hereunder.
- Within thirty (30) days of the Effective Date, Landlord shall deliver or make available to Tenant all of the documents identified on Exhibit B attached hereto (the "Property Documents"). Commencing on the Effective Date and continuing through the Rent Commencement Date, Tenant shall have reasonable access to the Property at all reasonable times during normal business hours for the purpose of conducting all tests and inspections as Tenant, in its sole discretion, deems advisable. including, without limitation, environmental inspections, soil inspections, engineering inspections, land use and zoning investigations, and all other inspections and/or investigations that Tenant may deem necessary in its sole and absolute discretion in order to determine the suitability and viability of the Leased Premises for Tenant's contemplated use. If, on or before 11:59 P.M. (Eastern Time) on the date that is sixty (60) days following the Effective Date ("Due Diligence Period"), Tenant shall, for any reason or no reason, notify Landlord in writing that it has determined, in its sole and absolute discretion, that it does not intend to lease the Leased Premises ("Due Diligence Termination Notice"), then as of delivery of such Due Diligence Termination Notice, this Lease shall, automatically and without the need for any further act by any party hereto, terminate and the parties hereto shall have no further rights or obligations under this Lease. other than those which, by their terms, survive the termination hereof, and Payment 1 (defined herein), to the extent deposited, shall be promptly returned to Tenant. In addition, Tenant shall have the right to extend the Due Diligence Period for two periods of thirty (30) days each by providing written notice of its intention to extend the Due Diligence Period to Landlord at least ten (10) days prior to the expiration of the Due Diligence Period, as it may be extended. During the Due Diligence Period, Landlord shall grant Tenant reasonable access to the Leased Premises for the purpose of performing such investigations and inspections, it being understood and agreed that Tenant shall have no right to perform any physically invasive inspections of the Leased Premises or any other tests that may damage the same, without Landlord's prior written consent, which may not be unreasonably withheld, conditioned or delayed. Tenant shall indemnify Landlord from and against any loss, damage, cost or expense ("Claim") incurred by Landlord as a result of Tenant's inspections of the Leased Premises; provided, however, that Tenant shall not be required to indemnify Landlord for any Claims arising from pre-existing matters at the Property. Tenant shall, following any such inspections, promptly restore the Leased Premises to the condition existing immediately prior to such inspections.
- (ii) Landlord has no knowledge of any uncured violations of federal, state, or municipal laws, ordinances, orders, regulations, or requirements affecting any portion of the Leased Premises, including, without limitation, the federal Clean Water Act, as amended, and the New Jersey

Freshwater Wetlands Protection Act, or any other Environmental Law (defined herein) applicable to the Property. Exhibit B includes all reports and investigations in Landlord's possession or under Landlord's control as of the Effective Date relating to any environmental or other condition on or under the Property. Landlord represents that the documents listed on Exhibit B are complete copies and do not contain any misstatements of material facts.

- (d) Tenant covenants and agrees that it shall, at its sole cost and expense, pursue a subdivision with respect to the Property such that the Leased Premises would be converted into a separate legal lot reasonably acceptable to Landlord and Tenant in all material respects, including the non-exclusive right to use the Access Roads, as defined in Section 8(d) (the "Subdivision"). Tenant agrees to use commercially reasonable efforts to diligently pursue the Subdivision after the Effective Date until the expiration of the Approvals Period (defined herein), subject to Force Majeure (defined herein) (the "Subdivision Expiration Date"). In the event the Subdivision does not occur on or prior to Subdivision Expiration Date, despite Tenant's good faith efforts to cause the Subdivision to occur on or prior to the Subdivision Expiration Date, Tenant shall have the right, by written notice to the Landlord within sixty (60) days after the Subdivision Expiration Date, to terminate this Lease by so notifying the Landlord of Tenant's election to terminate this Lease, and in such event the Lease shall terminate as of the date of such notice, and all liabilities and obligations hereunder shall cease, except for such liability that expressly survives such termination. In any case where Tenant prosecutes the Subdivision, provided, however, that Tenant shall have no such right of termination if the Lender does not require Subdivision as a condition of funding. Landlord will, without expense to Landlord, reasonably cooperate with Tenant to obtain the Subdivision, and Landlord will execute any necessary applications and instruments in connection therewith, provided that Tenant pays for all application, filing and similar fees and costs. The Subdivision will be deemed to have occurred when the Subdivision is validly and irrevocably granted without unreasonable qualification (except for qualifications as may be acceptable to Tenant) and is no longer subject to appeal.
- Tenant covenants and agrees that during the period commencing on the date of the expiration or written waiver by Tenant of the Due Diligence Period, as it may be extended pursuant to the terms of this Lease, and ending nine-hundred ninety (990) days thereafter (the "Approvals Period"), Tenant shall, at its sole cost and expense, pursue all necessary approvals and operating permits and to seek, at Tenant's sole cost and expense, all required land use, environmental permitting, occupancy permits/approvals and any other permits or approvals from all required local, County, State, federal, interstate and /or other governmental agencies, which Tenant determines, in its sole discretion to allow Tenant to construct and operate the Anaerobic Digester Biogas Facility on the Leased Premises and to otherwise used the Leased Premises for Tenant's Use (collectively, the "Approvals"). The Approvals shall include, without limitation, to the extent required in Tenant's sole discretion, inclusion of the Leased Premises within the Union County Solid Waste Plan, solid waste permits, permits pursuant to Section 404 of the Clean Water Act, sewer and water permits, waterfront development permits, air permits, designation of the Leased Premises as a redevelopment area pursuant to N.J.S.A. 40A:12A-1 et seq., major local site plan approvals for Tenant's Use, each on a final and unappealable basis. Also within such time period, Tenant may (1) seek to be designated as redeveloper pursuant to N.J.S.A. 40A:12A-1 et seq., (2) seek tax abatement on the Leased Premises, (3) seek to designate the Leased Premises or any portion thereof) as an Urban Enterprise Zone, (4) seek to designate the Leased Premises as an Environmental Opportunity Zone, (5) seek such other designations of the Leased Premises as may be necessary or convenient for the construction or operation of Tenant's Use, within Tenant's discretion, but subject to Landlord's consent, not to be unreasonable withheld. Landlord shall reasonably cooperate in all regards with Tenant's applications for such Approvals. In the event of any legal proceeding instituted by either (1) a third party challenging an approval or designation procured by Tenant, (2) Tenant challenging denial of an approval or designation sought by Tenant, or (3) Tenant challenging a condition of an approval or designation procured by Tenant, which Tenant deems in its reasonable discretion to be unreasonable, then in any of the foregoing events, the Approvals Period shall be tolled until the final and unappealable conclusion of such

proceeding, but in no event longer than fifteen (15) months; provided, however, that Tenant may request Landlord's consent, which shall not be unreasonably withheld, delayed or denied, to further extend the Approvals Period so long as the Tenant has diligently pursued and prosecuted such appeal and all judicial appeals have not then been exhausted and Tenant pays to Landlord, as additional rent, all Impositions (as hereafter defined), in equal monthly installments based on the prior calendar year's Impositions, commencing thirty (30) days following the last Lease Payment made pursuant to Section 5(a)(vii) below. If, on or before 11:59 P.M. (Eastern Time) on the date of the expiration of the Approvals Period, Tenant does not obtain the Approvals, either Party may terminate the Lease by providing written notice to the other Party at any time thereafter until the Rent Commencement Date; provided, however, that if Tenant receives a notice from the Landlord seeking to terminate this Lease pursuant to this Section 1(e), Tenant may elect, in its sole discretion, to proceed with this Lease despite not having received all Approvals, by providing written notice of such election to Landlord within thirty (30) days of Tenant's receipt of Landlord's termination notice, in which event, Landlord's termination shall be null and void and the Lease shall remain in full force and effect. Notwithstanding anything to the contrary contained in this Lease, in the event Tenant is unable, despite its good faith efforts and without otherwise being in default, to obtain all Approvals necessary to commence and complete construction of the Tenant Improvements, judicial appeals having been exhausted, then, at Tenant's option, not later than sixty (60) days following the date of issuance of a final determination on appeal, the parties shall reconvene to determine in good faith the method and timing for obtaining all necessary Approvals for revised Tenant Improvements and amending this Lease accordingly, such determination to be concluded within ninety (90) days.

- (f) The Tenant has examined the Leased Premises and, subject to Tenant's rights as provided in <u>Section 1(b)</u>, has entered into this Lease without any representation of the Landlord as to the condition of the Leased Premises, which is leased in its "as-is" condition, except as hereafter provided in <u>Section 7(b)</u>. The Tenant acknowledges that the Leased Premises was previously occupied by an industrial use and that remnants of that use remain. Such remnants include building slabs, underground utilities (out of service), pile supports, foundations, etc. Landlord will deliver the site to the Tenant with all below existing grade structures/utilities (including pilings, grade beams, pile caps and foundations) that may exist.
- 2. COMMENCEMENT AND ENDING DATE. The term of this Lease shall commence on the Effective Date and shall end on the last day of the thirtieth (30<sup>th</sup>) consecutive Lease Year (defined in <u>Section 4</u>, below) after the Rent Commencement Date. Such term shall be called the "original term". Any reference in this Lease to the "term of this Lease", or words of similar import, shall refer to the original term and any additional period or periods for which such term shall have been properly extended.
- 3. OPTIONS TO EXTEND/EXPIRATION OF TERM. Tenant shall have the right to extend the original term of this Lease for two (2) additional periods of twenty (20) years each (each, an "Extension Term," and collectively, the "Extension Terms") from the date upon which it would otherwise end, on the same terms and conditions as those specified in this Lease. The Tenant must exercise any right to extend the term of this Lease by notifying the Landlord in writing at least one hundred eighty (180) days prior to the expiration of the original term or the Extension Term then in effect. Notwithstanding anything to the contrary contained in this Lease, Tenant's option to extend the term of this Lease shall be exercisable only upon the condition that no Event of Default (as defined in Section 18) shall exist and be continuing at the time that Tenant elects to extend the original term or an Extension Term, as the case may be, and that the Lease shall be in full force and effect as of the last date on which the Tenant is entitled to exercise the right to extend the term. The Original Term, along with the Extension Terms, as applicable, are collectively referred to herein as the "Term." The last day of the Term is referred to herein as the "Expiration Date." If Tenant fails to quit and surrender the Leased Premises on the Expiration Date or earlier termination of this Lease, except to the extent and for the purposes specifically permitted in Section 9(e), Landlord may, at its option, construe such holding over as a tenancy from month to month, subject to all the terms, covenants and conditions of this Lease, except as to duration thereof (the "Holdover Period"), and the Monthly Rent (as

defined below), which shall increase by fifty percent (50%) from the Monthly Rent paid at the expiration or termination of the term of the Lease.

4. LEASE YEAR. The term "Lease Year" as used herein shall mean a period of twelve (12) consecutive full calendar months. The first Lease Year shall commence upon the earlier of (i) the date of Tenant occupancy together with all conditions as agreed in the Lease being satisfied or waived, including Tenant obtaining all Approvals, and (ii) subject to the tolling provisions set forth in Section 1(a) hereof, three (3) years after the expiration or waiver of the Due Diligence Period ("Rent Commencement Date"), but in no event shall the Rent Commencement Date be any sooner than the completion date of the Landlord Work, as defined herein. If the Rent Commencement Date shall not occur on the first day of a calendar month, the first Lease Year shall commence on the first day of the calendar month following the Effective Date. Each succeeding Lease Year shall commence upon the anniversary date of the first Lease Year.

## 5. MINIMUM RENT.

(a) Upon execution and delivery of the Lease by both parties, Tenant will deliver to Landlord's counsel, Gertner Mandel, LLC, acting as escrow agent (the "Escrow Agent"), the sum of Fifty Thousand Dollars ("Payment 1") to be held in a non-interest bearing escrow account pursuant to the terms and conditions herein. If Tenant terminates this Lease in accordance with Section 1(c) hereof, the Escrow Agent shall deliver Payment 1 to Tenant, upon receipt of Tenant's termination notice and without any further action required, in which event the Lease will become null and void. So long as Tenant has not terminated this Lease in accordance with Section 1(c) hereof, Payment 1 shall be released to Landlord and Tenant; provided, however, that if Landlord does not resolve the State's Tidelands Claims as required by Section 1(a) hereof on or before the Payment 2 due date, Escrow Agent shall continue to retain Payment 1 until such time as the Landlord has resolved the State's Tidelands Claim in accordance with Section 1(a) hereof. So long as Tenant has not terminated this Lease in accordance with Section 1(c) hereof, and subject to the tolling provisions set forth in Section 1(a) hereof, Tenant shall make the following payments (together with Payment 1, the "Lease Payments"), each such payment to be delivered as provided below:

| (i)   |                 |   |  |  |  |
|-------|-----------------|---|--|--|--|
| (ii)  |                 |   |  |  |  |
| (iii) |                 |   |  |  |  |
| (iv)  |                 |   |  |  |  |
| (v)   |                 |   |  |  |  |
| (vi)  |                 |   |  |  |  |
| (vii) | <b>24</b> 14.50 | (1) (1) (1) (1) (1) (1) (1) (1) (1) (1) |  |  |  |
| (VII) |                 |   |  |  |  |

- (viii) Notwithstanding anything to the contrary set forth in this Section 5(a), if Tenant does not properly terminate the Lease during the Due Diligence Period and proceeds with its approvals and permitting process all Lease Payments subsequent to Payment 1 will be paid to and retained by Landlord. If the Lease is not terminated during the Approvals Period in accordance with the terms of this Lease, Lease Payments 1, 2 and 3 shall be applied to the Security Deposit and /or the first payments of Rent until the credit is exhausted. All other Lease Payments shall be paid directly to Landlord and shall not be credited against Rent, Security Deposit or additional Rent.
- (b) Subject to credit as provided in <u>Section 5(a)</u> and adjustment as provided in <u>Section 5(d)</u>, commencing on the Rent Commencement Date, Tenant shall pay to Landlord, at the address set forth above or at such other place of which Landlord shall have given Tenant written notice, a basic annual rental in an amount equal to Section or each acre (or portion thereof) included in the Leased Premises, including uplands and riparian areas ("Rent"). Tenant shall pay the rent in equal monthly installments ("Monthly Rent").
- (c) Except as provided in Section 5(a), following the Rent Commencement Date, Monthly Rent shall be paid by Tenant to Landlord in advance, on or before the first day of each month during the term, without notice, demand, abatement, deduction, counterclaim or setoff of any kind. Tenant shall pay the rent in lawful money of the United States, which shall be legal tender for all debts, public and private, at the time of payment. Any obligation of Tenant for payment of Rent which shall have accrued with respect to any period during the Term shall survive the expiration or termination of this Lease. If Monthly Rent is payable for a fraction of a month, the amount payable shall be a pro-rate portion of Monthly Rent, pro-rated on a per diem basis, with respect to the fractional calendar month.
- period thereafter during the Term, shall be an amount equal to the Rent payable during the prior five Lease Year period, multiplied by the greater of (i) 110% and (ii) the sum of 100% and the difference, expressed as a percent between the Consumer Price Index (as hereinafter defined) for the first day of the prior five Lease Year period and the Consumer Price Index for the first day of the current five Lease Year period. Until such time as the Consumer Price Index for the applicable period is determined, Tenant shall pay Rent at the prior rate, and upon the determination of the Consumer Price Index Tenant shall pay any deficiency in the Rent paid by it within thirty (30) days after receipt from landlord of notice that such determination has been made. The "Consumer Price Index" shall mean the Consumer Price Index for Urban Wage Earners and Clerical Workers for New York and Northeastern New Jersey (base years 1982 1984 = 100), published by the Bureau of Labor Statistics, United States Department of Labor, or successor or substitute index appropriately adjusted. If the Consumer Price Index (or a successor or substitute index) is not available, a reliable governmental or other nonpartisan publication evaluating the information theretofore used in determining the Consumer Price Index shall be selected by Landlord and used for the computation herein set forth.
- (e) Whenever under the terms of this Lease any sum of money is required to be paid by Tenant in addition to the Rent and said additional amount so to be paid is not designated as "additional rent," then said amount shall nevertheless, if not paid when due, be deemed "additional rent" and collectible as such with any installment of rental thereafter falling due hereunder, or, if no such installment thereunder shall fall due, on demand.
- 6. USE. The Leased Premises shall be used only for the Tenant's Use, including, development, construction and operation of an anaerobic digester project for the generation and distribution of electrical energy and or renewable natural gas (RNG), with all uses customarily incidental thereto. Tenant, at its discretion, and (subject to availability and negotiation of terms and conditions), shall have non-exclusive

use of the existing or future rail line(s) leading to the Leased Premises and exclusivity within its Leased Premises.

# 7. LANDLORD AND TENANT IMPROVEMENTS.

- (a) Tenant shall perform all of the following ("Tenant's Work") at Tenant's sole cost and expense.
  - Tenant shall construct, remove, repair or relocate upon the Leased Premises any buildings, structures, curbing, pavement, driveways, machinery, rails, switches or other equipment or improvements, necessary or desirable for Tenant's Use (collectively, "Tenant Improvements") now or hereafter placed upon the Leased Premises without incurring any liability to Landlord. Tenant Improvements shall specifically include all site work, bringing utilities to the Leased Premises and related items. Tenant, at Tenant's sole cost and expense, shall also obtain all permits and post all bonds and escrows related to Tenant Improvements and Tenant's Use. In connection with the expiration of the Term, or upon any earlier termination of this Lease, (a) Tenant shall present to landlord a written decommissioning and removal plan for the Anaerobic Digestion Biogas Facility and all other equipment or facilities ancillary to the Anaerobic Digestion Biogas Facility no later than ninety (90) days prior to the expiration of the Term, or no later than ninety (90) days after the earlier termination of this Lease; (b) such plan shall include the removal of all physical material related to the Anaerobic Digestion Biogas Facility and all other equipment or facilities ancillary to the Anaerobic Digestion Biogas Facility (but not buildings, bulk heading, piers, rail facilities or other improvements that Tenant and Landlord mutually agree are not directly related to or part of the Anaerobic Digestion Biogas Facility) to a depth not to exceed twenty-four inches (24"), and restoration of the surface of the land and environmental engineering controls to substantially the same condition it was in at the Rent Commencement Date (reasonable wear and tear, condemnation, casualty damage due to a Force Majeure excepted); (c) the plan shall be subject to the prior approval of Landlord, not to be unreasonably withheld or delayed; (d) the decommissioning and removal plan for the Anaerobic Digestion Biogas Facility and all other equipment or facilities shall be completed by Tenant within twelve (12) months after the date of the expiration of the Term or any earlier termination of this Lease; and (e) Tenant shall comply with any State of New Jersey requirements to the extent that Tenant's decommissioning and removal plan for the Anaerobic Digestion Biogas Facility and all other equipment or facilities ancillary to the Anaerobic Digestion Biogas Facility disturbs any site capping or other environmental engineering controls (collectively (a) through (e) are hereinafter referred to as the "Restoration"). All Tenant Improvements (such as buildings, bulkheading, piers, rail, etc. not removed as part of the Restoration shall become or remain the property of Landlord upon expiration of the Lease. If Tenant fails to complete the Restoration as provided in this Section, at the option of Landlord, any remaining Tenant Improvements may become the property of Landlord or be disposed of by Landlord at Tenant's cost; provided, however, that notwithstanding anything to the contrary set forth herein, so long as Tenant performs the Restoration in accordance with a plan approved by Landlord, Landlord's removal of any Tenant Improvements shall not be at Tenant's cost.
  - (ii) Tenant shall, at Tenant's sole cost, at its discretion, design, permit, and construct a barge dock/pier (and access to the dock/pier) within a 300' riparian area (the "Tenant Dock Area") to be located within the riparian area as reflected on Exhibit A-2 and included as a part of the Leased Premises for its exclusive use, at its cost, except for Tenant's bulkhead improvements within the Tenant Dock Area, which shall be constructed in accordance with Section 7(b)(iii). Tenant's exclusivity of the dock/pier shall include 24/7 unencumbered / non-restricted direct access, in accordance with the Term of the Lease including all extensions.

- (iii) Tenant (at its cost) will provide all required utilities including sewer improvements to Block 587, Lot 8 and within the Leased Premises including all connections thereto. Tenant will be responsible for all utility usage payments during the Lease Term. Landlord shall reasonably cooperate with Tenant's efforts to provide utility service to the Leased Premises in terms of easements.
- (iv) Tenant (at its cost) shall be responsible for new pipeline installations and connections offsite/on site, and within the Leased Premises, with Landlord's cooperation not to be unreasonably withheld.
- (v) Tenant shall perform all site work and improvements required to construct and operate Tenant's Use, including its (on-site and off-site) access and entry road.
- (vi) The Parties agree that anaerobic digestion technologies are improving at a rapid rate and that it is probable that Tenant may (although Tenant shall not be required to) replace, increase or renovate from time to time the Anaerobic Digestion Biogas Facility on the Leased Premises with a new anaerobic digestion biogas facility or improvements to the exiting Anaerobic Digestion Biogas Facility that have increased energy capture and efficiency, subject to the terms and condition hereof. The Parties agree that the design of any such newer facilities and/or replacement of the Anaerobic Digestion Biogas Facility, including any and all plans therefor, shall be and remain subject to all conditions hereof that apply with respect to the construction and installation of the initial Anaerobic Digestion Biogas Facility at the Leased Premises.
- Landlord and Tenant acknowledge and agree that Landlord will be required to finalize New Jersey Department of Environmental Protection ("NJDEP") environmental final "capping" of the Leased Premises (the "Final Capping"); and that Landlord shall not be responsible for the construction of Tenant Improvements on the Leased Premises. Landlord shall, at its sole cost and expense, deliver clean fill (as such term is defined in N.J.A.C. 7:26E-1.8) meeting NJDEP Residential Direct Contact Cleanup Standards (as such term is defined in N.J.A.C. 7:26D) ("Clean Fill") to the Leased Premises in such amounts as is necessary for the Final Capping of the Leased Premises and once Landlord delivers all such Clean Fill to the Leased Premises, Tenant shall, at Landlord's direction, install the Clean Fill in such manner as is reasonably determined by Landlord to conform to the Final Capping requirements; provided, however, that nothing set forth herein shall render Tenant responsible to the NJDEP for providing the Final Capping, which responsibility to NJDEP shall remain exclusively with the Landlord. Landlord represents that prior to placement on the Leased Premises, pursuant to N.J.A.C. 7:26D and E et seq. Clean Fill will have been evaluated to determine if any compounds exceed the NJDEP Impact to Ground Water Soil Screening Levels and, if necessary, conducted an Impact to Ground Water pathway investigation. Landlord further represents that no Clean Fill will be accepted for placement on the Leased Premises which exceeds the most stringent Direct Contact Soil Remediation Standards ("DCSRS") or would trigger a ground water investigation. Notwithstanding the foregoing, Tenant shall commence with performing such Final Capping in accordance with NJDEP fill standards within/on the Leased Premises after the Rent Commencement Date. Notwithstanding the foregoing, to the extent that the Tenant's planned site improvements satisfy the NJDEP/Licensed Site Remediation Professional ("LSRP" as that term is defined in N.J.S.A. 58:10C-2) capping requirements, Landlord shall not be obligated to provide Clean Fill for the portions of the Leased Premises that will be covered by Tenant's Improvements. Tenant shall make such changes to Tenant's design of Tenant Improvements as may be reasonably required to satisfy the Final Capping required, provided that such changes can be either made at no cost to Tenant or Landlord agrees to reimburse Tenant for the cost of such changes and further

provided that such changes do not result in any material alteration in the scope or function of Tenant's Improvements and will not materially delay the construction thereof. Such improvements may include, but not be limited to, pavements, building slabs, miscellaneous impervious surfaces or suitable landscaped areas.

- (viii) All security measures reasonably necessary, in Tenant's opinion, shall be provided for the Leased Premises by Tenant, and Tenant shall be permitted to construct certain improvements for security, including, but not limited to, warning signs and other measures appropriate and reasonable to protect against damage or destruction of Tenant's Use and other improvements or injury or damage to persons or property or on the Leased Premises, by Tenant, at Tenant's sole cost and expense, subject to the terms and conditions hereof, all at Tenant's sole cost and expense. Tenant may require that Landlord be accompanied by a representative of Tenant at all times while on the Leased Premises and shall abide by any and all reasonable safety precautions.
- (b) Landlord shall perform all of the following ("Landlord Work") at Landlord's sole cost and expense, subject to reimbursement from Tenant as provided herein
  - (i) Landlord shall demolish and remove all existing platforms and supporting piles located in the Tenant Dock Area along the Arthur Kill to a depth of twenty four (24) inches below the mud line at the time of construction.
  - Landlord shall demolish and remove the existing buildings on the Leased Premises (other than the "Monolith", as hereafter defined) and shall raise the elevation of the Leased Premises to fourteen (14) feet or to such other elevation required by the NJDEP or any other governmental entity with jurisdiction, with NJDEP permitted fill materials ("Alternative Fill")(as that term is defined in the Technical Requirements for Site Remediation, N.J.A.C. 7:26E-1.8) meeting the NJDEP's Fill Material Guidance for SRP Sites (April 2015, Version 3.0), FEMA Flood Hazard Compliance and substantially as set forth on the Delivery Conditions Plan, attached hereto as Exhibit C (the "Delivery Conditions Plan"). Landlord shall also perform all other work as indicated to be performed by Landlord on the Delivery Conditions Plan. Landlord represents that prior to placement on the Leased Premises, pursuant to N.J.A.C. 7:26D and E et seq., Alternative Fill will have been evaluated to determine compliance with Like-on-Like and 75th Percentile in accordance with NJDEP guidance referenced in this section. Additionally, if any compounds exceed the NJDEP Impact to Ground Water Soil Screening Levels an Impact to Ground Water pathway evaluation will be performed. Landlord further represents that no Alternative Fill containing polychlorinated biphenyls ("PCBs") at concentrations exceeding the Residential Direct Contact Soil Remediation Standard ("RDCSRS") of 0.2 parts per million ("ppm") and no Alternative Fill containing compounds that would trigger a ground water investigation will be accepted for placement on the Leased Premises. Notwithstanding the foregoing, in no event shall exposure to the Alternative Fill require the donning of personal protection greater than "Level D", as that term is defined in the Occupational Safety and Health Standards, 29 CFR Section 1910.120 (Appendix B), which further shall not include a requirement to wear of otherwise possess an escape mask, face shield or outer, chemical resistant disposable boots.
  - (iii) Subject to reimbursement of amounts paid by Landlord pursuant to contracts (the "Approved Contracts") approved, in advance by Tenant, Landlord shall be responsible for (A) demolition of the existing three sided structure (the "Monolith"), and (B) bulkheading in the Tenant Dock Area. If Tenant fails or refuses to consent to the contracts for either or both the demolition of the Monolith and/or the bulkheading in the Tenant Dock Area, then the Leased Premises shall be delivered to Tenant without completion of those improvements and such improvements shall not be included in Landlord's Work. If tenant does not approve of the contracts

presented by Landlord, Tenant may contract to demolish the Monolith and/or install the bulkheading in the Tenant Dock Area at Tenant's sole cost and expense, subject to Landlord's approval of such contracts, which approval shall not be unreasonably withheld. Upon demolition of the Monolith, the Parties acknowledge and agree that, notwithstanding the provisions of § 7(b)(ii), a low area will be left to accommodate excess material from trenching and foundation excavation.

- (iv) Within the first fourteen (14) days of the Due Diligence Period, the LSRP of record for the Property shall issue a letter detailing the current status of any remaining remedial activities that, as of the Effective Date, are required by applicable Environmental Laws (as hereafter defined) to be completed for the Property that provides a description and timeframe of any ongoing remedial requirements, which include but are not limited to a modification to the existing Deed Notice, application for a revised NJDEP Remedial Action Permit for soils, as well as future NJDEP inspection and reporting obligations after the modified Deed Notice is recorded and revised Remedial Action Permit for soil is issued ("LSRP Letter") to be attached hereto as **Exhibit D**. With respect to the Leased Premises, the LSRP Letter shall describe the NJDEP environmental cap, including anticipated/proposed design specifications, extent, and certify as the remedial activities which remain outstanding, as well as the associated timeframes for completion before said cap can be constructed on the Leased Premises. The LSRP Letter shall also certify that so long as the environmental conditions existing at the Property as of the letter's date remains consistent, no other remedial activities will be required.
- (v) Tenant shall pay to Landlord a \$1,000,000.00 reimbursement for Landlord provided site improvements, which shall be paid on or before the Rent Commencement Date.
- (vi) On or before the Rent Commencement Date, Tenant shall pay to Landlord all amounts expended by Landlord pursuant to an Approved Contract for demolition of the Monolith and bulkheading in the Tenant Dock Area.

#### 8. EASEMENTS.

- (a) Tenant shall consent to such utility easements over, under and across any and all areas of the Leased Premises, as are set forth on the attached <u>Exhibit "A-2"</u>. No such easements as contemplated by this Section shall interfere with Tenant's use of the Leased Premises.
- (b) Tenant shall be responsible for all costs and expenses attributed to the Property and related to maintenance and use of Tremley Point Road. Tenant shall have the right, on behalf of Landlord, to negotiate the allocable share attributed to the Property.
- (c) All costs and expenses related to maintenance and upkeep of the Access Roads shall be paid, pro rata, by Tenant and all other tenants of the Property, as negotiated and agreed by Tenant and all other tenants of the Property.
- (d) The Leased Premises shall include (i) a non-exclusive thirty (30) foot wide access easement (the "Access Road") and (ii) a non-exclusive twenty-eight (28) foot wide access easement (the "Secondary Access Road" and together with the Access Road, the "Access Roads") both from Tremley Point Road over and across the existing and future driveways leading to Tremley Point Road and located on and reserved in any Lease of proposed Lot 8.01 Block 587, as they may be constructed, reconstructed and/or further developed from time to time, for the purpose of vehicular ingress and egress to and from proposed Lot 8.02 Block 587 and Tremley Point Road, including the right to cross over any rail lines that transverse the Access Road as more specifically described on Exhibit "A-2". Contemporaneously with perfection of

the Subdivision, Landlord shall also record, or cause to be recorded an access easement, which shall be substantially in the form of the attached Exhibit H ("Access Easement"). To the extent not set forth in this Lease, the terms and conditions applicable to the operation and maintenance of the Access Roads shall be as set forth in the Access Easement. The Access Roads shall not be unreasonably or unnecessarily blocked, closed, altered, changed or removed and shall remain in place as shown on Exhibit A-2 unless the Landlord and Tenant agree otherwise. Any rights of the Tenant under the Access Easement shall terminate on the expiration or earlier termination of this Lease.

- (e) The Leased Premises shall be the beneficiary of a railroad crossing license agreement (the "Crossing Agreement"), which shall be substantially in the form of the attached Exhibit E. Landlord shall exercise its best efforts such that the Crossing Agreement is in full force and effect prior to commencement of operations on the rail line. Upon execution of the Crossing Agreement, Landlord shall execute and deliver to Tenant any documents reasonably required to provide to Tenant the same rights, subject to the same obligations, that the Landlord has under the Crossing Agreement, to the extent not already provided for in the Crossing Agreement. All rights provided or otherwise granted to Tenant under the Crossing Agreement shall terminate on the expiration or earlier termination of this Lease.
- (f) The Leased Premises shall be subject to an easement for a "Temporary Access Driveway" for the benefit of an adjoining property owner, as more specifically set forth on the Delivery Conditions Plan.
- (g) Landlord represents that if any other portions of the Property are leased, such leases shall include a reservation of the non-exclusive right to use the Access Roads and cost sharing provisions set forth in Section 8(c).

## 9. ENVIRONMENTAL.

## (a) As used in this Lease:

"Environmental Laws" means any federal, state or local law, ordinance, rule, regulation, policy, order, permit, license, decree, common law, or treaty now or hereafter in force regulating, relating to or imposing liability or standards concerning materials or substances known or suspected to be toxic or hazardous to health or safety, the environment or natural resources, including without limitation, regulation of releases and disposals to air, land, water and groundwater and further including, but not limited to, the New Jersey Environmental Rights Act, N.J.S.A. 2A:35A-1 et seq.; the New Jersey Spill Compensation and Control Act, N.J.S.A. 48:10-23.11 et seq.; the New Jersey Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq.; the Industrial Site Recovery Act, N.J.S.A. 13:1K-6 et seq. ("ISRA"); Hazardous Substances Discharge Reports and Notices Act, N.J.S.A. 13:1K-15 et seq.; the Brownfield and Contaminated Site Remediation Act, N.J.S.A. 58:10C-1 et seq.; the Resource Conservation and Recovery Act, as amended, 42 U.S.C. §6901 et seq. ("RCRA"); the Comprehensive Environmental Response Compensation and Liability Act, as amended, 42 U.S.C. §9601 et seq. ("CERCLA"); the Water Pollution and Control Act, 33 U.S.C. §1251, et seq.

"Hazardous Materials" means any hazardous or toxic chemical, waste, byproduct, pollutant, contaminant, compound, product or substance, including without limitation, asbestos, polychlorinated biphenyls, petroleum (including crude oil or any fraction or byproduct thereof), and any material the exposure to, or manufacture, possession, presence, use, generation, storage, transportation, treatment, release, disposal, abatement, cleanup, removal, remediation or handling of which is prohibited, controlled, limited or regulated in any manner under any Environmental Laws.

"Incidental Materials" means inventory held for sale, construction materials (other than asbestos or polychlorinated biphenyls), equipment, fixtures, fuel and similar products contained in vehicles, customary office and janitorial supplies and other maintenance materials that are or contain Hazardous Materials, to the extent they are incidental to, and reasonably necessary for, the construction, operation, maintenance and use of the Leased Premises.

"Release" means any spill, leak, emission, discharge or disposal of Hazardous Materials into the environment other than pursuant to and in compliance with valid permits issued under applicable Environmental Laws.

(b) Tenant acknowledges and is fully aware that the Leased Premises are or will be subject to various environmental engineering and institutional controls and restrictions, including, without limitation, monitoring requirements anticipated to be limited to periodic inspections of the Leased Premises in order to comply with NJDEP-related permits, a cap and Deed Notice (as amended), as well as a pre-existing Administrative Consent Order, dated September 5, 1990, as amended by Amendments dated August 5, 1993 and August 13, 2002 (collectively, "Environmental Controls"). Tenant shall maintain the Leased Premises in compliance with Environmental Controls and shall not take any action in violation of said Environmental Controls and shall indemnify and hold harmless Landlord with regard to any such violations. Tenant agrees to provide reasonable access to Landlord so that Landlord may comply with any and all ongoing inspection and reporting obligations required by such Environmental Controls.

# (c) Tenant agrees and covenants that:

- (i) Neither Tenant nor any of Tenant's licensees, agents, invitees, subcontractors, suppliers or employees (collectively, the "Tenant Group") will engage in activities or operations during the term of this Lease that involve the Release of Hazardous Materials on the Leased Premises.
- (ii) At all times following the date Tenant takes possession of the Leased Premises, Tenant shall obtain, maintain in effect and comply with all permits, licenses and other requirements pursuant to any Environmental Laws relating to activities on the Leased Premises by Tenant and the Tenant Group.
- (d) Landlord warrants, represents, covenants and agrees that, except as otherwise provided in this Lease, Tenant shall not be liable for, and Landlord hereby indemnifies and agrees to defend and hold Tenant harmless and be responsible for the costs and expenses incurred, including but not limited to reasonable attorney's fees at both the trial and appellate levels, in connection with presence of any Hazardous Materials on the Leased Premises occurring on, prior or subsequent to the date of the Lease to the extent caused by Landlord or persons or entities under Landlord's control or Landlord's predecessors in interest. In addition, Landlord covenants and agrees that (i) Landlord shall be responsible for remediating Hazardous Materials on the Leased Premises in accordance with Environmental Laws that existed prior or subsequent to the date of the Lease to the extent caused by Landlord or persons or entities under Landlord's control or Landlord's predecessors in interest; (ii) Landlord shall not use, store, dispose of or release any Hazardous Materials on the Leased Premises; and, (iii) Landlord shall not cause or permit to exist or be used, stored, disposed of or released on the Leased Premises any Hazardous Material.
- (e) Tenant shall indemnify, defend and hold harmless Landlord, its members, officers, partners, directors, shareholders, employees and agents, from any liabilities, claims and losses arising from, on account of, or in connection with (i) the violation of any Environmental Law by Tenant or the Tenant Group, (ii) the presence, use, generation, storage, or Release of Hazardous Materials in, on, under, or above the Leased Premises, to the extent occurring as a result of the acts or omissions of Tenant or the Tenant Group, and (iii) any violation of the obligations of Tenant contained in this Section.

- (f) If compliance with the provisions of ISRA (as defined herein) is required either during the Term, upon the expiration of the Term, or earlier termination of the Term, Tenant shall, at Tenant's own expense, comply with the provisions of ISRA for the Leased Premises, and shall, at Tenant's own expense, make all submissions to, provide all information to, and comply with all requirements of the Industrial Site Evaluation Element or its successor of the NJDEP with the cooperation of Landlord, at no cost, but as reasonably necessary. Provided, further, to the extent Tenant shall have any investigatory or remediation obligations as a result of such ISRA trigger, Tenant shall be permitted to remediate to non-residential standards and which may include the use of institutional and engineering controls, that are subject to prior review and approval by Landlord, which shall not be unreasonably withheld. Tenant's obligations under this Section shall arise if the New Jersey Industrial Site Recovery Act, the regulations promulgated thereunder and any amending and successor legislation and regulations ("ISRA"), N.J.S.A. 13:1K et seq., applies to the Leased Premises, whether triggered by Landlord or Tenant.
- (g) Landlord shall, at Landlord's own expense, comply with the provisions of ISRA, if either ongoing or required prior to commencement of the Lease, triggered by commencement of the Lease or triggered by Landlord during the Term, including but not limited to making all submissions, providing all information, and complying with all requirements of the Industrial Site Evaluation Element or its successor of the NJDEP with the cooperation of Tenant as reasonably necessary. Provided, further, to the extent Landlord shall have any investigatory or remediation obligations, Landlord shall be permitted to remediate to non-residential standards, with the use of institutional and engineering controls that are no more restrictive than what currently exist and so long as said controls neither prohibit, nor unreasonably inhibit Tenant's construction, use and operation of the Leased Premises.
- (h) In no event and notwithstanding anything to the contrary herein, shall Landlord's compliance obligations pursuant to any Environmental Laws include any restrictions or controls, either as part of a remedial action or on the use and design of the Property, that unreasonably inhibits or prohibits Tenant's construction, use and operation of the Leased Premises. Any restrictions or controls proposed to be placed on the Property by Landlord whether or not for the purpose of compliance with Environmental Laws requires Tenant's written consent, which shall neither be unreasonably withheld nor contradict the recommendation of Landlord's LSRP.
- (i) The covenants and indemnities contained in this Section shall survive the expiration or termination of this Lease.

#### 10. TAXES.

(a) Landlord shall pay all Impositions (defined herein) and sewer and water charges with respect to the Property (including the Leased Premises) until the expiration of the period beginning on the Effective Date and ending on the last day of the Approvals Period (the "Landlord's Tax Period"), on or before the due date therefor. So long as this Lease has not been properly terminated in accordance with the provisions hereof, commencing on the first day following the expiration of the Landlord's Tax Period, Tenant shall pay, to Landlord, monthly, or as Landlord may otherwise demand, as additional rent, all real estate taxes, all payments in lieu of taxes, all special assessments all general assessments, all water and sewer charges, rates and rents, water meter charges, and all such other taxes, levies, payments in lieu of taxes ("PILOT Payments") and charges of any kind, general and special, extraordinary as well as ordinary, and each and every installment thereof which shall or may during the Term be charged, levied, laid, assessed, imposed, become due and payable, or liens upon or for or with respect to the Leased Premises or by reason of the use or occupancy of or any transaction or activity carried on or conducted in the Leased Premises, together with all interest and penalties thereon if payment is not made by Tenant in a timely fashion. All taxes, assessments, levies, PILOT Payments and charges described in this Section 10 including

interest and penaltics thereon are sometimes herein referred to as "Impositions." Landlord shall pay all Impositions collected from Tenant on or before the due date if received by Tenant at least three (3) days prior to the due date. Notwithstanding the foregoing, sewer and water charges, rates and rents shall be billed by the local authority or supplier directly to the Tenant and paid directly by the Tenant. Notwithstanding anything to the contrary set forth herein, "Impositions" shall not include income, franchise, corporate, estate, inheritance, transfer, succession, profits or revenue taxes, unless the same are levied, in whole or in part, in lieu of any of the other items included within the definition of "Impositions" above. The amount of Impositions for which Tenant is liable will be calculated using the full benefit of all discounts and credits that are made available by the taxing authority. Upon Tenant's request, Landlord shall furnish Tenant, within ten (10) days after the date when Impositions or any Landlord Impositions already paid by Tenant to Landlord are due and payable, receipts of the appropriate taxing authority, or other proof, such as cancelled checks, reasonably satisfactory to Tenant, evidencing the payment thereof. If Landlord does not pay any such Impositions or Landlord Impositions as and when due, Tenant shall have the right, but not the obligation, upon prior written notice thereof to Landlord to pay any such Impositions or Landlord Impositions on Landlord's behalf. Upon any such payment, Landlord shall reimburse Tenant for such costs within ten (10) Business Days of written notice for the same. "Landlord Impositions," as used herein, shall mean the following (but only to the extent the same are levied or charged against the Property, but not the Leased Premises, or otherwise payable by Landlord pursuant to this Lease): (i) personal property taxes; (ii) business taxes; (iii) occupancy and rent taxes (if any); (iv) water, water meter and sewer rents, rates and charges; (v) excises; (vi) levies; (vii) any other governmental levies, rents. assessments or taxes, general and special, ordinary and extraordinary, foreseen and unforeseen, now or hereinafter enacted, of any kind whatsoever; and (viii) any fines, penalties and other similar governmental charges applicable to the foregoing, together with any interest or costs with respect to the foregoing; provided that Landlord shall not be responsible for any fines, penalties, late fees or interest accruing as a result of the failure of Tenant to pay, or failure to pay timely, any Impositions owed by Tenant. Notwithstanding anything to the contrary set forth herein, in the event that Tenant enters into a Financial Agreement with the municipality in which the Leased Premises are located and such Financial Agreement requires that Tenant make PILOT Payments directly to the municipality, Tenant shall make such PILOT Payments directly to the municipality on or prior to the due date thereof.

- (b) As used in the following provisions of this Section 10(b), the following terms shall have the following meanings:
  - (i) "Landlord Tax Challenge" shall mean any Tax Challenge made by Landlord.
  - (ii) "Tenant Tax Challenge" shall mean a Tax Challenge made by Tenant pursuant to the following provisions of this Section 10(b).
  - (iii) "Tax Challenge" shall mean any challenge to any of the impositions (or the assessment or other method or amount on which the same are based).
  - (iv) "Tax Year" shall mean the annual period in respect of which impositions or any component thereof, are, or is, assessed.

If the Tenant so elects, Tenant shall have the exclusive right to commence and prosecute a Tenant Tax Challenge with respect to Impositions (or any component thereof) for any Tax Year, and Landlord shall cooperate with Tenant with respect thereto, such cooperation to include (i) providing information, and (ii) executing documents required to be executed by the owner of the Leased Premises. Tenant shall bear all costs and expenses incurred by it in commencing and prosecuting any Tenant Tax Challenge (including attorneys' fees) and Tenant shall indemnify, defend and hold harmless from any cost, liability, judgment or expense incurred by Landlord in connection with any Tenant Tax Challenge. Landlord shall have no right

to commence and prosecute a Landlord Tax Challenge unless Landlord shall have obtained tenant's prior written consent thereto, which consent shall not be unreasonably withheld, conditioned or delayed.

- (c) Nothing contained in this Lease shall require Tenant to pay any federal, state, municipal or other income, gross receipts or excess profits taxes assessed against Landlord, or any franchise, corporation, capital levy, estate, succession, inheritance, devolution, payroll, stamp, gift or transfer taxes of Landlord, or any similar tax, or any tax imposed solely because of the nature of the entity of Landlord, or any tax imposed on rent received by Landlord under this Lease; provided, however, that if at any time during the Term the methods of taxation prevailing at the commencement of the Term shall be altered so that in lieu of or as a substitute, in whole or in part, for the taxes, assessments, levies, impositions or charges now or hereafter levied, assessed or imposed on real estate and the improvements thereon, there shall be levied, assessed or imposed any tax or other charge on or in respect of the Leased Premises or the rents, income or gross receipts of Landlord therefrom (including any municipal, state, or federal levy), then such tax or charge shall be deemed an imposition, but only to the extent that such imposition would be payable if the Leased Premises or the rent, income or gross receipts received therefrom, were the only property of Landlord subject to such imposition, and Tenant shall pay and discharge the same as herein provided in respect of the payment of impositions.
- (d) If under any applicable laws, Tenant is eligible for any tax credit, benefit or incentive for alternative energy expenditure established by any local, state or federal government, then, at Tenant's option, Landlord shall, at no cost to Landlord, cooperate with Tenant to amend this Lease or replace it with a different instrument to revise or otherwise modify Tenant's interest in the Leased Premises to a substantially similar interest that renders Tenant eligible for such tax credit, benefit or incentive; provided, however, the economic terms of the subject Lease shall neither be revised nor modified and any amendment or replacement shall include substantially all of the terms and conditions of this Lease and the exercise of such option shall not adversely affect Landlord or its tax position.
- 11. UTILITY CHARGES. There are presently no utilities servicing or available at the Leased Premises. Tenant shall be responsible for providing and paying the cost of all utilities, including but not limited to, all rents and charges for water and sewer services and all costs and charges for gas, heat, light, electricity, power, telephone and any other utility or service used or consumed in or servicing the Leased Premises. Landlord shall reasonably cooperate with Tenant to provide utility service to the Leased Premises.
- 12. GOVERNMENT REGULATION. At Tenant's expense, Tenant will promptly comply with all laws, rules, regulations, decisions, codes, orders or ordinances of any federal, state or municipal government, or their appropriate regulatory agencies, in force during the Term of this Lease, including, without limitation, those relating to Tenant's Use and the carrying on of Tenant's business on the Leased Premises.

#### 13. SUBORDINATION, NON-DISTURBANCE AND ESTOPPEL.

- (a) This Lease shall not be subordinate to the lien of any mortgage which may now or hereafter affect the Leased Premises.
- (b) The Parties agree, at any time, and from time to time (and without payment to the other of any consideration therefor), upon not less than ten (10) days' prior notice by either Party to the other, to execute, acknowledge and deliver to the requesting Party, a statement in writing addressed to the requesting Party (and/or its designee) certifying that this Lease is unmodified and in full force and effect (or if there have been modifications, that the same is in full force and effect as modified and stating the modifications), stating the dates to which the rent has been paid, stating such other information concerning this Lease and

Tenant's tenancy as the requesting Party reasonably shall request, and stating whether or not there exists any default in the performance by Landlord of any term, covenant or condition contained in this Lease and, if so, specifying each such default, it being intended that any such statement delivered pursuant to this Section 13(b) may be relied upon by the requesting Party and by any mortgagee or prospective mortgagee of any mortgage affecting the Leased Premises or any purchaser or prospective purchaser of the Leased Premises. When so requested, such statement shall be submitted in writing under oath by a person or persons having knowledge of the statements made therein.

(c) Neither Landlord nor any mortgagee may modify any easement or right of way for the benefit of Tenant or the Leased Premises.

## 14. EMINENT DOMAIN DAMAGE AND DESTRUCTION.

- (a) At any time hereafter, if as a result of eminent domain proceedings, there should be a taking of such portion of the Leased Premises or the right of access to the Leased Premises so that the Leased Premises cannot thereafter be reasonably used for Tenant's Use, which determination shall take into account, among other factors, limitations on access and related parking, at the option of Tenant, this Lease may (i) immediately terminate upon the giving of notice to Landlord by Tenant and any Rent paid in advance will be returned to Tenant, or (ii) Tenant may continue in possession of the remaining portion of the Leased Premises, with no reduction in Rent.
- (b) If the condemnation is not such a taking as would entitle Tenant to terminate this Lease, the entire proceeds of the award or sale shall be paid to Landlord and Tenant shall restore, as far as possible, but subject to reimbursement by Landlord of Tenant's restoration costs to the limits of the condemnation proceeds to be received by Landlord, the Leased Premises to their condition immediately prior to the eminent domain proceedings. Landlord will advise Tenant immediately upon receipt of notice of the commencement of proceedings by any governmental authority having eminent domain powers to acquire any part of the Leased Premises.
- (c) In the event of a taking, or a conveyance in lieu of a taking, resulting in the termination of this Lease, Landlord and Tenant will cooperate in applying for and prosecuting a claim for that taking and agree that the aggregate net award, after deducting expenses and costs, which include reasonable attorneys' fees incurred in connection therewith, shall be paid to Landlord (or if required, to any mortgagee).
- (d) Notwithstanding anything to the contrary set forth herein, should title or possession of all of the Leased Premises be taken in condemnation proceedings by a governmental authority or private party under the exercise of the right of eminent domain, or should a partial taking render the remaining portion of the Leased Premises wholly unsuitable for Tenant's use, all payments made on account of any taking by eminent domain shall be made to Landlord, except that Tenant, at its sole discretion, shall be entitled seek a separate award for any damages allowable by law, including but not limited to: (i) the removal and relocation Tenant's business, (ii) for the loss of goodwill, (iii) lost profits, (iv) the loss and/or damage to any Leased Premises that tenant elects or is required not to remove, and (v) for the loss of use of the Leased Premises by Tenant and Landlord shall have no right, title or interest in or to any separate award made therefor; provided, however, that the same shall not have the effect of reducing any award otherwise payable to Landlord.
- (e) If the Anaerobic Digester Biogas Facility or any other improvements are damaged by fire or other insured casualty, Tenant shall promptly notify Landlord of such casualty, and Tenant shall notify Landlord in writing (the "Restoration Notice") of its reasonable estimate of how long it will take (after the date of the casualty) to completely restore the Leased Premises, including time required to obtain insurance, to prepare plans for reconstruction, to obtain building permits, to account for weather conditions, and to

complete the likely contract bidding process and all other relevant factors (the "Restoration Period"). Tenant shall repair the Leased Premises, except that if, in Tenant's reasonable judgment, the damage would require more than one (1) year to repair or if less than one (1) year then remains on the current Term, Tenant shall have the right to terminate this Lease by so notifying the Landlord in writing within one hundred twenty (120) days following the date of such casualty; and in such case the Lease shall terminate as of the date of such notice and all Rent shall be adjusted to the date of such notice. If the Lease is not terminated as aforesaid, the work of restoring the Leased Premises shall be commenced promptly by Tenant and completed with due diligence, taking into account the time reasonably required for Tenant to procure said insurance proceeds, and construction delays due to shortages of labor or material or other causes beyond Tenant's reasonable control.

15. SIGNAGE. Subject to obtaining any and all consents and approvals required by all governmental bodies having jurisdiction thereover, Tenant may place or erect signage on the Leased Premises which conforms to all requirements of such governmental bodies.

## 16. ASSIGNMENT AND SUBLET.

- Landlord may sell, mortgage, transfer or lease the Leased Premises or the Property to others. However, any such sale, mortgage, lease or transfer of the Leased Premises by Landlord shall be subject to this Lease and any modifications or amendments thereof granted to Tenant prior to or after such sale, mortgage, lease or transfer. Except as provided in Section 16(b), Tenant shall not, without the prior written consent of the Landlord, assign, mortgage, hypothecate, or encumber this Lease, nor sublet or license the Leased Premises or any part thereof, or permit the Leased Premises or any part thereof, to be used by others, whether voluntarily or by operation of law or otherwise, without the prior written consent of Landlord in each instance, which shall not be unreasonably withheld, conditioned or delayed. Any sale or transfer of more than fifty percent (50%) of any stock or other equity interest in Tenant shall be deemed an assignment of this Lease and shall not be permitted without the prior written consent of the Landlord, which shall not be unreasonably withheld, conditioned or delayed. Any transfer of this Lease from Tenant by merger, consolidation, liquidation or otherwise by operation of law, shall be deemed to constitute an assignment for purposes of this Lease. Tenant will not permit any business to be operated in or from the Leased Premises by a concessionaire or licensee. In the event of a non-permitted subletting or licensing of all or any part of said Leased Premises or purported assignment of this Lease, it is hereby agreed that Tenant will nevertheless remain fully and primarily liable under the terms, covenants and conditions of this Lease. At Landlord's election, in the event that Tenant assigns or sublets this Lease and does not comply with the terms and conditions of this Section 16, Landlord may consider such subletting or assignment as an Event of Default and elect any remedies provided hereunder. If this Lease is assigned or the Leased Premises, or any part thereof, shall be subleased or occupied by anybody other than Tenant and Tenant has not complied with the express provisions of this Section 16, Landlord may, collect from the assignee, subtenant, or occupant any Rent payable by Tenant under this Lease and apply the amount collected to Rent herein reserved, but such election by Landlord will not be deemed an acceptance of the assignee, subtenant or occupant as Tenant nor a release of Tenant from performance under this lease.
  - (b) Notwithstanding the foregoing, Tenant shall have the right, without Landlord's prior consent, to assign this Lease or sublease all or any part of the Leased remises leased by Tenant to (each, a "Permitted Transferee"): (i) to any parent, affiliate or subsidiary of Tenant; (ii) the transferee of all or substantially all of the ownership interests or assets, as the case may be, of Tenant; and (iii) any other entity, including, without limitation, an urban renewal entity, the management of which is controlled by Tenant or its principals. Tenant shall deliver to Landlord written notice of its intent to so assign or sublease this Lease to a proposed transferee/subtenant, which notice, in all events other than with respect to a Permitted Transfer, shall be accompanied by the proposed assignee's/subtenant's complete financial statements for the past two (2) years,

as well as latest interim financial statement, including, without limitation, balance sheet, income statement, statement of cash flow and notes. In the event Landlord provides its consent, no such assignment, subletting, or other transfer, by new lease or otherwise shall release Tenant from liability under this Lease, unless Landlord shall provide such release expressly in writing to Tenant.

#### 17. LEASEHOLD FINANCING.

- (a) Right to Encumber. Tenant, any successor or assignee of Tenant, or any permitted holder of a sublease or license (each hereinafter sometimes referred to as an "Obligor") with respect to the whole of the Leased Premises may obtain construction financing, working capital and/or other financing in connection with the construction and operation of the Anaerobic Digester Biogas Facility at the Leased Premises ("Financing"). Any party providing Financing is referred to herein as a "Lender". Tenant shall be permitted to pledge or encumber to any Lender, at any time throughout the Term, all or any portion of the Obligor's rights and interests under this Lease, upon notice to, but without the requirement to obtain the consent of, Landlord, subject to the terms and conditions hereof. Any such Financing shall provide that the Lender will give notice to Landlord of any default of the Obligor thereunder.
- (b) <u>Covenants for Lenders' Benefit</u>. Tenant and Landlord expressly agree between themselves and for the benefit of any Lender that if an Obligor mortgages, pledges, or encumbers any of its rights and interests as provided in <u>Section 17(a)</u> above, then notwithstanding any other provision of this Lease to the contrary:
- (i) Each Lender shall have the right, at its discretion, to take, or cause to be taken, any action required to be performed under this Lease by the Obligor that is party to such Lender's mortgage, pledge or encumbrance, and any such action performed by such Lender, if timely performed, shall be as effective to prevent or cure a Default under this Lease and/or a forfeiture of any of such Obligor's rights under this Lease as if done by such Obligor itself.
- The right of a Lender to receive notices and to cure Obligor's Events of Default pursuant to the provisions of this Section 17(b) shall be available only to those Lenders which shall have notified Landlord in writing of their name and address, and whose lien is recorded in the official records of the County in which the Leased Premises is located, regardless of whether the specific provision in question expressly so states. No Event of Default which requires the giving of notice to Obligor shall be effective unless a like notice is given to all Lenders which shall have notified Landlord in writing of their name and address. If Landlord shall become entitled to terminate this Lease due to an uncured Event of Default by Obligor, Landlord will not terminate this Lease unless it has first given written notice of such uncured Event of Default to each Lender which shall have notified Landlord in writing of their name and address and has given each such Lender at least (A) thirty (30) days for monetary defaults (which monetary defaults shall include, for avoidance of doubt, any default in payment of indemnity obligations hereunder) and (B) an additional ninety (90) days for all other defaults to remedy or cause to be remedied such default; provided, however, that any such Lender shall endeavor, in good faith, to cure any such Obligor's Events of Default as promptly as is reasonably possible. Landlord shall accept such performance by or at the instigation of a Lender as if the same had been done by Tenant. Furthermore, if within such cure period a Lender notifies Landlord that it must foreclose on Obligor's interest or otherwise take possession of Obligor's interest under this Lease (a "Foreclosure Notice") in order to cure the Event of Default, Landlord shall not terminate this Lease and shall permit such Lender a reasonable period of time (not to exceed nine (9) months from such Lender's Foreclosure Notice to Landlord) for such Lender, with the exercise of due diligence, to foreclose or acquire Obligor's interest under this Lease and, to perform or cause to be performed all of the covenants

and agreements to be performed and observed by Obligor if and so long as: (A) the Lender cures all monetary defaults of the Tenant occurring on or after the date of the Foreclosure Notice; (B) the Lender cures all non-monetary defaults reasonably capable of being then cured by the Lender and occurring on or after the date of the Foreclosure Notice; and (C) the Lender takes commercially reasonable steps to institute, prosecute and complete foreclosure proceeding or otherwise acquire Obligor's interest under this Lease.

- (iii) In the event a Lender shall elect to exercise its rights hereunder, such Lender shall have no personal liability to Landlord and the sole recourse of the Landlord in seeking enforcement of its obligations under this Lease or any new lease entered in pursuant to Section 17(b)(iv) below shall be such Lender's interest in this Lease and the Leased Premises. Upon the sale or other transfer by any Lender of its interest in the Lease or the Leased Premises, such Lender shall have no further duties or obligations hereunder.
- In case of the termination or rejection of this Lease as a result of any Event of Default hereunder or the bankruptcy, insolvency or appointment of a receiver in bankruptcy with respect to Tenant, Landlord shall provide prompt notice thereof to the Lenders which shall have notified Landlord in writing of their name and address. Upon written request of the Lender that is the beneficiary of the first priority security interest in the Tenant's interest under this Lease, made within forty (40) days after such Lender receives written notice of such rejection or termination, Landlord shall enter into a new lease agreement with such Lender, or its designee or assignee, within twenty (20) days after the receipt of such request, upon the same terms, covenants, conditions and agreements as contained in this Lease for the remaining term of the original Lease before giving effect to such termination or rejection. Such new lease agreement shall be effective as of the date of the termination or rejection of this Lease. Landlord shall have no rights to terminate such new lease based upon Events of Default occurring prior to the execution of the new lease; provided, however, such new lease shall require the Lender to cure all defaults of Tenant under this Lease occurring on or after the date of Landlord's notice to Lender of termination or rejection of this Lease, which are reasonably susceptible of being cured by the Lender, including, without limitation, the payment of all then delinquent Rent, additional rent and Impositions. Landlord hereby agrees with and for the benefit of the Lenders which shall have notified Landlord in writing of their name and address that the provisions of this Section 17(b)(iii) shall survive termination, rejection or disaffirmation of the Lease, whether by Event of Default or as a result of the bankruptcy, insolvency or appointment of a receiver in bankruptcy and shall continue in full force and effect thereafter to the same extent as if this Section 17(b)(iii) were a separate and independent instrument. It is the intent of the parties hereto that any such new lease shall have the same priority as this Lease.
- (vi) There shall be no merger of this Lease, or of the leasehold estate created by this Lease, with the fee estate in the Leased Premises by reason of the fact that this Lease or the leasehold estate or any interest therein may be held, directly or indirectly, by or for the account of any person or persons who shall own the fee estate or any interest therein, and no such merger shall occur unless and until all persons at the time having an interest in the fee estate in the Leased Premises and all persons (including the Lenders) having an interest in the Lease or in the estate of Landlord and Tenant shall join in a written instrument effecting such merger and shall duly record the same.
- (v) Landlord shall, at a Lender's request, provide to Tenant and such Lender (i) confirmation that such Lender is a "Lender" for purposes of this Lease and (ii) an estoppel certificate, in form and substance reasonably acceptable to Landlord, acknowledging the Lender's mortgage or other lien or encumbrance, confirming the continuing effectiveness of this Lease, identifying any modifications hereto and any breaches or Events of Default hereunder, and containing such other information and agreements as Tenant or such Lender may reasonable request. Landlord shall duly execute and return same to Tenant and/or Lender within ten (10) days of Tenant's or Lender's request thereof.

- (vi) Except for an Immaterial Amendment (defined herein), Landlord shall not cancel, modify, amend, surrender or terminate this Lease or accept any cancellation, modification, amendment, termination or surrender hereof, except for a termination of this Lease as a result of an Event of Default and subject to any Lender's rights under this Section 17, including, without limitation, the right to obtain a new Lease pursuant to Section 17(b)(iv) hereof, without prior written notice to such Lender. Except for a termination of this Lease as a result of an Event of Default and subject to any Lender's rights under this Section 17 (including, without limitation, the right to obtain a new Lease pursuant to Section 17(b)(iv) herein), any attempted cancellation, termination, surrender, amendment, modification or merger of this Lease without prior written notice to f Lender shall be of no force or effect. For purposes of this Lease, "Immaterial Amendment" shall mean, an amendment or modification to this Lease which does not (A) affect in any manner (i) the size of the Leased Premises, (ii) the rent or any other economic provision of this Lease, (iii) the Term of this Lease, (iv) the use provisions, (v) the assignment, subletting and mortgaging provisions, or (vi) any other material term or provision of this Lease and (B) in any manner increase Tenant's obligations or decrease Tenant's rights under this Lease other than in a de minimis manner.
- (vii) Tenant may add Lender as an additional insured under, and may add each Lender to any loss payable endorsement of, any and all insurance policies to be carried by Tenant in respect of the Leased Premises (in each case to the extent applicable) and all such policies (to the extent applicable) shall state that the insurance proceeds are to be paid to the parties herein specified to be held for the benefit of the parties hereto and applied in the manner set forth in this Lease. Tenant may agree to delegate or assign to any Lender any rights it has to (x) commence, maintain or settle any arbitration, action, suit or legal proceeding between Landlord and Tenant and (y) settle, consent and/or receive, or may grant a right of prior consent or approval in favor of any Lender with respect to such rights to settle, consent, approve and/or receive, fire or casualty loss claims or awards or payments in condemnation or eminent domain.

# 18. DEFAULT PROVISIONS; LANDLORD'S REMEDIES.

- (a) Any of the following events shall constitute a default under this Lease (each an "Event of Default" and collectively "Events of Default"):
- (i) Tenant's default in the payment of any installment of Rent, additional rent or in the payment of any real estate taxes or other charges due in accordance with this Lease, including reimbursement of amounts due to Landlord pursuant to <u>Section 7(b)</u> or otherwise, on any day upon which the same shall be due and payable and such default shall continue for ten (10) business days after Tenant shall have received written notice thereof from Landlord; or
- (ii) Tenant's doing or permitting anything to be done, whether by action or inaction, contrary to any of Tenant's obligations pursuant to this Lease (except as to the payment of Rent, additional rent and real estate taxes or other charges due in accordance with this Lease) and such situation shall continue and shall not be remedied by Tenant within thirty (30) days after Landlord shall have given to Tenant notice specifying the same; or, in the case of a happening or default which cannot with reasonable diligence be cured within a period of thirty (30) days, Tenant shall not be deemed to have committed an Event of Default so long as Tenant commences the cure of any such failure within such thirty (30) day period, indemnifies Landlord against any fines, penalties, claims or damages related to such failure, and thereafter diligently prosecutes the same to completion in not more than an additional one hundred eighty (180) days; or
- (iii) Except as expressly permitted by Section 16 or Section 17. The occurrence of any event or the arising of any contingency whereby this Lease, any interest in it, the estate thereby granted or, any portion thereof, or the unexpired balance of the Term would by operation of law or otherwise devolve upon or pass to any person, firm or corporation other than Tenant, and said attachment shall not be

discharged or disposed of within sixty (60) days after the levy thereof;

- (iv) Tenant's failure to maintain insurance as required by <u>Section 30</u> and such situation shall continue and Tenant has not commenced the cure of any such failure within such thirty (30) day period, indemnifies Landlord against any fines, penalties, claims or damages related to such failure, and thereafter diligently prosecutes the same to completion in not more than an additional one hundred eighty (180) days.
- (b) Subject to the express provisions of <u>Section 17</u> hereof, upon the occurrence of any Event of Default, the Landlord may exercise any one or more of the following remedies, in addition to all other remedies provided in this Lease and by law or in equity:
- (i) The Landlord may, by written notice to Tenant, accelerate all Rent, additional rent and other sums due or to become due hereunder, which shall thereupon be immediately due and payable in full.
- (ii) The Landlord may give the Tenant a notice (the "Termination Notice") of its intention to terminate this Lease specifying a day not less than five (5) days thereafter, and, upon the day specified in the Termination Notice, this Lease and the term and estate hereby granted shall expire and terminate and all rights of the Tenant under this Lease shall expire and terminate, but the Tenant shall remain liable for damages as hereinafter set forth. Notwithstanding the foregoing, the Landlord may institute dispossess proceedings for non-payment of Rent or additional rent, distraint or other proceedings to enforce the payment of Rent or additional rent without giving the Termination Notice.
- (c) Upon any such termination or expiration of this Lease, or other termination of Tenant's possession under this Lease, the Tenant shall peaceably quit and surrender the Leased Premises to the Landlord, and the Landlord or Landlord's agents and employees may without further notice immediately or at any time thereafter enter upon or re-enter the Leased Premises, or any part thereof, and possess or repossess itself or themselves thereof either by summary dispossess proceedings, ejectment, any suitable action or proceeding at law, agreement, force or otherwise, and may dispossess and remove Tenant and all other persons and property from the Leased Premises without being liable to indictment, prosecution, or damages therefor, and may repossess the same, and may remove any persons therefrom, to the end that Landlord may have, hold and enjoy the Leased Premises again. The words "enter" or "reenter", "possess" or "repossess" as used in this Lease are not restricted to their technical legal meaning.
- (d) In the event of any breach by Tenant of any of the agreements, terms, covenants or conditions contained in this Lease, Landlord shall be entitled to seek to enjoin such breach and shall have the right to invoke any right and remedy allowed at law or in equity or provided in this Lease.
- (e) Each right and remedy of the Landlord provided for in this Lease shall be cumulative and shall be in addition to every other right or remedy provided for in this Lease or now or hereafter existing at law or in equity or by statute or otherwise, and the exercise or beginning of the exercise by the Landlord of any one or more of the rights of remedies provided for in this Lease or now or hereafter existing at law or in equity or by statute or otherwise shall not preclude the simultaneous or later exercise by Landlord of any or all other rights or remedies provided for in this Lease or now or hereafter existing at law or in equity or by statute or otherwise.
- (f) Suit or suits for the recovery of damages, or any installments thereof, may be brought by Landlord from time to time at its election, and nothing contained in this Lease shall be deemed to require Landlord to postpone suit until the date when the term of this Lease would have expired if it had not been so terminated under the provisions of this Section 18 or under any provision of law, or had Landlord not

re-entered the Premises. Nothing contained in this Lease shall be construed to limit or preclude recovery by Landlord against Tenant of any sums or damages to which Landlord may lawfully be entitled by reason of any default under this Lease or otherwise on the part of Tenant. Nothing contained in this Lease shall be construed to limit or prejudice the right of Landlord to prove and obtain as liquidated damages by reason of the termination of this Lease or reentry on the Premises for the default of Tenant an amount equal to the maximum allowed by any statute or rule of law in effect at the time when, and governing the proceeding in which, such damages are to be proved.

- (g) Upon the occurrence of an Event of Default, the Tenant hereby authorizes and empowers the Landlord, at the Landlord's option (without imposing any duty upon the Landlord to do so), to re-enter the Leased Premises as agent for the Tenant or any successor-occupant of the Leased Premises under the Tenant, or for its own account or otherwise, and to relet the same for any term expiring either prior to the original expiration date hereof, or simultaneously therewith, or beyond such date, and to receive rent and apply same to pay all fees and expenses incurred by the Landlord as a result of such Event of Default, including without limitation any legal fees and expenses arising therefrom, the cost of re-entry and re-letting and to the payment of the rent and other charges due hereunder. No entry, re-entry or reletting by the Landlord, whether by summary proceedings, termination or otherwise, shall discharge the Tenant from its liability to the Landlord as set forth herein. Furthermore, notwithstanding anything to the contrary contained in this Lease, in the event of a default by Tenant under this Lease, Landlord shall have no duty to mitigate its damages by attempting to relet the Premises or in any other manner.
- (h) The Tenant shall be liable for all costs, charges and expenses, including reasonable attorney's fees and disbursements, incurred by the Landlord by reason of the occurrence of any Event of Default or the exercise of the Landlord's remedies with respect thereto.
- (i) The Tenant, for the Tenant, and on behalf of any and all persons claiming through or under the Tenant, including creditors of all kinds, does hereby waive and surrender all rights and privileges which they or any of them might have under or by reason of any present or future law, to redeem the Leased Premises or to have a continuance of this Lease for the term after being dispossessed or ejected therefrom by the valid order of a court of competent jurisdiction.
  - (j) The provisions of this <u>Section 18</u> shall survive the expiration or termination of this Lease.
- 19. LATE CHARGES. In the event that any installment of Rent, additional rent, real estate taxes, impositions or the like shall be delinquent and overdue for a period in excess of ten (10) business days following Tenant's receipt of written notice from Landlord that such Rent, additional rent, real estate taxes, impositions or the like are delinquent, a "late charge" in an amount equal to twelve percent (12 %) per annum shall accrue thereon from the due date thereof until paid. This charge shall be in addition to and not in lieu of, any other remedy which the Landlord may have and is in addition to all reasonable fees and charges of any attorney which the Landlord may employ to enforce the Landlord's remedies in connection with any default hereunder, whether such remedy(ies) shall be authorized herein, or by law. Such "late charges", if not previously paid, shall, at the option of the Landlord, be added to and become a part of the succeeding monthly installment of Rent to be made under the Lease.
- 20. PARTIES. All rights and liabilities herein given to, or imposed upon, the respective parties hereto, shall extend to and bind the several respective heirs, executors, administrators, successors and assigns of said parties.
- 21. EFFECT OF CONVEYANCE; LIABILITY OF LANDLORD; DEFINITION OF "LANDLORD".

- (a) The term "Landlord" as used in this Lease shall mean and include only the owner or owners (and any mortgagee in possession) at the time in question of the fee estate in the Leased Premises, so that in the event of any transfer or transfers (by operation of law or otherwise) of the title to such fee estate, Landlord herein named (and in case of any subsequent transfers or conveyances, the then transferor) shall be and hereby is automatically freed and relieved, from and after the date of such transfer or conveyance, of all liability in respect of the performance of any covenants or obligations on the part of Landlord contained in this Lease thereafter to be performed, provided that (a) any funds in which Tenant has an interest, in the hands of such Landlord or the then transferor at the time of such transfer, shall then be turned over to the transferee, and (b) any amount then due and payable to Tenant by Landlord or the then transferor under any provision of this Lease shall then be paid to Tenant and (c) the transferee shall be deemed to have assumed and agreed to perform, subject to the limitations of this Section 21 (and without further agreement between or among the parties or their successors in interest, and/or the transferee) and only during and in respect of the transferee's period of ownership, all of the terms, covenants and conditions in this Lease contained on the part of Landlord thereafter to be performed, which terms, covenants and conditions shall be deemed to "run with the land," it being intended hereby that the terms, covenants and conditions contained in this Lease on the part of Landlord shall, subject as aforesaid, be binding on Landlord, its successors and assigns, only during and in respect of their respective successive periods of ownership.
- It is specifically understood and agreed that in the event of a breach by Landlord of any of the terms, covenants or conditions of this Lease to be performed by Landlord, the monetary liability of Landlord in relation to any such breach shall be limited to the equity of Landlord in the Leased Premises and the proceeds and income therefrom, including Landlord's interest in this Lease and any sums at the time due or to become due under this Lease. Tenant shall look only to Landlord's equity in the Leased Premises and the proceeds and income therefrom for the performance and observance of the terms, covenants and conditions of this Lease to be performed or observed by Landlord and for the satisfaction of Tenant's remedies for the collection of any award, judgment or other judicial process requiring the payment of money by Landlord in the event of a default in the full and prompt payment and performance of any of Landlord's obligations hereunder. No property or assets of Landlord, other than Landlord's equity in the Leased Premises and the proceeds and income therefrom, shall be subject to lien, levy, execution or other enforcement procedure for the satisfaction of Tenant's remedies in any matter whatsoever arising out of or in any way connected with this Lease or any of its provisions, any negotiations in connection therewith, the relationship of Landlord and Tenant hereunder or the use and occupancy of the Leased Premises; and in confirmation of the foregoing, if any such lien, levy, execution or other enforcement procedure so arising shall be on or in respect of any property or assets of Landlord, other than Landlord's equity in the Leased Premises, Tenant shall promptly release any property or assets of Landlord, other than Landlord's equity in the Leased Premises, from such lien, levy, execution or other enforcement procedure by executing and delivering, at Tenant's expense and without charge to Landlord, any instrument or instruments, in recordable form, to that effect prepared by Landlord (but any such instrument of release shall not release any such lien, levy, execution or other endorsement procedure on or in respect of Landlord's equity in the Leased Premises).
- 22. ENTIRE AGREEMENT. This Lease, and the exhibits attached hereto and forming a part hereof, set forth all the covenants, promises, agreements, conditions and understandings between Landlord and Tenant concerning the Leased Premises. There are no covenants, promises, agreements, conditions or understandings, either written or oral, between the parties other than as herein set forth. No subsequent alteration, amendment, change or addition to this Lease shall be binding upon Landlord or Tenant unless reduced to writing and signed by both parties.
  - 23. NOTICE. All notices required to be sent under this Lease shall be in writing and shall be sent by U.S. certified mail, return receipt requested, by a nationally recognized overnight courier or by hand delivery addressed as follows (or to such other address as

either party shall later designate by written notice to the other): If intended for Tenant:

RNG Energy Solutions, LLC 163 North Shore Road Hampton, NH 03842

With a copy to:

Chiesa Shahinian & Giantomasi, PC One Boland Drive West Orange, NJ 07052 Attention: Anthony Pantano, Esq.

If intended for Landlord:

Linden Marine, L.L.C. 1355 Campus Parkway Wall, NJ 07719 Attention: William R. Clayton

With a copy to:

Gertner Mandel, L.L.C.

By Mail:

P.O. Box 301

Lakewood, NJ 08701

Attention: Ross D. Gertner, Esq.

By Delivery:

1215 E. Veterans Highway

Jackson, NJ 08527

Attention: Ross D. Gertner, Esq.

All notices shall be deemed to have been given when received or when delivery is refused. Notices may be given by an attorney representing the party giving such notice.

## 24. COMPLIANCE WITH LAWS.

- (a) Tenant covenants throughout the term of this Lease at Tenant's sole cost and expense, promptly to comply with all laws and ordinances and the orders, rules, regulations, and requirements of all federal, state and municipal governments and appropriate departments, commissions, boards and officers thereof and the orders, rules and regulations of any Board of Fire Underwriters or similar body or agency where the Leased Premises are situated, or any body, now or hereafter constituted, exercising similar functions, foreseen and unforeseen, ordinary and extraordinary, relating to the Leased Premises or to Tenant's use and occupancy thereof and Tenant's Use.
- (b) Tenant will observe and comply with the requirements of the carriers of any policy of insurance respecting the Leased Premises and the requirements of all policies of public liability, fire, casualty and all other policies of insurance at any time in force with respect to the Leased Premises and the equipment and contents thereof.

- In the event that Tenant shall fail or neglect to comply with the aforesaid laws, ordinances, rules, orders, regulations and requirements, or any of them, or in case Tenant shall fail or neglect to make any necessary repairs as and to the extent required pursuant to this Lease, then the Landlord or its agents may, without any obligation to do so, provide written notice to Tenant of Landlord's intention to enter the Leased Premises and make said repairs and comply with any and all of the said laws, ordinances, rules, orders, regulations and requirements at the cost and expense of the Tenant. In the event that Tenant does not comply with the aforesaid laws, ordinances, rules, orders, regulations and requirements, or any of them, or in case Tenant shall fail or neglect to make any necessary repairs as and to the extent required pursuant to this Lease. as set forth within thirty (30) days after Landlord shall have given to Tenant notice specifying the same; or, where compliance cannot with reasonable diligence be achieved within such period of thirty (30) day period, Tenant does not commence to achieve compliance within such thirty (30) day period and thereafter diligently prosecute the same to completion in not more than an additional ninety (90) days following the date of Tenant's receipt of Landlord's notice, Landlord may enter upon the Leased Premises and/or achieve such compliance, at Tenant's sole cost and expense and in case of Tenant's failure to pay therefor, the said cost and expense shall be added to the next month's Rent, together with interest at the floating rate per annum equal to the prime rate as published in the Wall Street Journal plus five percent (5%) (or the maximum amount permitted by law, whichever shall be less) and shall be due and payable as such.
- (d) The Leased Premises is subject to a deed restriction prohibiting use of the Leased Premises for a landfill or a solid waste transfer facility without the prior written consent of Landlord's predecessor in title (the "Deed Restriction"), a copy of which is attached hereto as Exhibit F. If, at any time, the Tenant's Use is determined, by a Court of competent jurisdiction, to violate the Deed Restriction, Tenant will comply with any order of that Court, including cessation of Tenant's business operations on the Leased Premises, but in which event this Lease shall not terminate and Tenant shall continue to pay Rent, additional rent and other charges due hereunder in accordance with the provisions of this Lease.
- (e) Except to the extent required to be complied with or paid by Tenant pursuant to this Lease, Landlord shall comply with all laws, regulations and restrictions and pay all taxes, fees and charges which, if not complied with or unpaid, may adversely affect the Leased Premises, this Lease and Tenant's use and enjoyment of the same. If Landlord shall fail to so comply, or contest the obligation, within thirty (30) days following Tenant's notice to Landlord specifying the nature of the failure, Tenant may cure the failure on behalf of Landlord and seek reimbursement from Landlord.
- 25. CAPTIONS AND SECTION NUMBERS. The captions and section numbers appearing in this Lease are inserted only as a matter of convenience and in no way define, limit, construe or describe the scope or intent of such sections of this Lease.
- 26. BROKER'S COMMISSION. Each of the parties represents and warrants that there are no claims for brokerage commissions or finder's fees in connection with the execution of this Lease, except for the amounts due and to be paid by Tenant to Cushman & Wakefield of New Jersey, Inc., ("Tenant's Broker"), pursuant to a separate agreement between Tenant and Tenant's Broker and each of the parties agrees to indemnify the other against and hold it harmless from all liabilities arising from such a claim.
- 27. PARTIAL INVALIDITY. If any term, covenant or condition of this Lease or the application thereof to any person or circumstances shall be invalid or unenforceable, the remainder of this Lease or the application of such term, covenant or condition to persons or circumstances other than those as to whom it is held invalid or unenforceable shall not be affected thereby and each term, covenant or condition of this Lease shall be valid and be enforceable to the fullest extent permitted by law.
- 28. NO RECORDING. This Lease shall not be recorded. However, a memorandum or short form of this Lease for the purpose of recording may be recorded by Tenant following the Effective Date. The

memorandum of the lease shall be substantially in the form of Exhibit G-1, attached hereto and incorporated herein by this reference shall be executed by Landlord and Tenant and recorded, with recordation costs paid by Tenant. The memorandum or short form of this Lease shall comply with the laws of the state in which the Leased Premises is located and shall describe the parties, the Leased Premises and the term of this Lease and shall incorporate this Lease by reference. If a memorandum or short form of this Lease is recorded, as condition thereto, simultaneously with the execution of the memorandum or short form of this Lease, Landlord and Tenant shall execute a termination of such memorandum, which shall be substantially in the form of Exhibit G-2, attached hereto and incorporated herein by this reference and which shall be executed by Landlord and Tenant in recordable form, which termination shall be delivered to Landlord, to be held in escrow. Landlord shall record the termination of such memorandum or short form of this Lease only following the termination of this Lease. Transfer or recordation taxes, if any, shall be borne by Tenant.

29. NO AGENCY. Nothing contained herein shall be deemed by the parties hereto, or by any third party, as creating a relationship of principal and agent, or of partnership, or of joint venture between the parties. Neither the method of computation of Rent nor any other provision contained herein nor any acts of the parties shall begin to create any relationship between the parties except the relationship of landlord and tenant.

## 30. INSURANCE.

- (a) Tenant agrees at all times during the entries onto the Property, which shall be only as may be permitted under this Lease, that either Tenant or Tenant's contractors will maintain (a) comprehensive general liability insurance ("CGL") with coverages of not less than \$1,000,000.00 for injury or death to any one person and \$2,000,000.00 for injury or death to more than one person and \$500,000.00 with respect to property damage, by water or otherwise, and (b) worker's compensation insurance for all of their respective employees in accordance with applicable statutory requirements. Tenant shall deliver proof of the insurance coverage required pursuant to this Agreement to Landlord (in the form of a certificate of insurance) prior to Tenant's or it's contractors' entry onto the Property (provided that if any contractor's certificate of CGL insurance does not show worker's compensation coverage, such contractor shall be required to provide a separate certificate of insurance for such worker's compensation coverage).
- 30(a) above, Tenant shall maintain and keep in effect throughout the term of this Lease Commercial General Liability insurance on ISO Occurrence Form CG0001 10/93 or a substitute form providing equivalent coverage and shall cover liability arising from premises, operations, independent contractors, products-completed operations and personal and advertising injury. Landlord shall be included as an additional insured on the CGL, using ISO Additional Insured Endorsement CG2010 11/85 or CG2010 10/93 and CG2037 or CG2038 and CG2037 or CG2010 0704 and CG2307 or Endorsement providing equivalent coverage to the additional insureds. The insurance for the additional insureds shall be as broad as the coverage provided for the Named Insured. It shall apply as Primary and Non-contributory Insurance before any other insurance or self-insurance, including any deductible, maintained by, or provided to, the additional insured. The CGL policy will provide a 30 day notice of cancellation endorsement for additional insureds, except for non-payment by policy terms and conditions. The CGL insurance, with such limits as may be reasonably determined by Tenant from time to time, but not less than two million dollars (\$2,000,000.00) per occurrence and two million dollars (\$2,000,000.00) annual aggregate.
- (c) Beginning on the date that Tenant begins to construct Tenant Improvements (and not simply engage in the design of same or apply for a permit for same), Tenant shall maintain and keep in effect throughout the term of this Lease Business Automobile Liability with the limits of at least \$1,000,000 combined single limit. Business Auto coverage must include coverage for liability arising out of all owned,

leased, hired and non-owned automobiles. Landlord shall be included as an additional insured on the Business Automobile policy on a Primary and Non-contributory basis. The Business Auto coverage shall provide a broadened pollution CA99-48 endorsement.

- (d) Beginning on the date that Tenant begins to construct Tenant Improvements (and not simply engage in the design of same or apply for a permit for same), Tenant shall maintain, and keep in effect throughout the term of this Lease, Commercial Umbrella Liability with limits of at least ten million dollars (\$ 10,000,000) per occurrence and ten million dollars (\$ 10,000,000 annual aggregate, increasing thereafter by five million dollars (\$5,000,000) at the end of every ten (10) Lease Years. This Umbrella coverage must include all entities that are additional insureds on the CGL and Business Automobile policies on a Primary and Non-contributory basis.
- (e) Beginning on the date that Tenant begins to construct Tenant Improvements (and not simply engage in the design of same or apply for a permit for same), Tenant shall maintain and keep in effect throughout the term of this Lease a Worker's Compensation and Employer's Liability policy with limits of at least \$1,000,000 per Accident, \$1,000,000 Disease per Employee and a \$1,000,000 Policy Limit. The Worker's Compensation policy must have statutory limits and be from a company authorized to do business in the State of New Jersey.
- (f) Beginning on the date that Tenant begins to construct Tenant Improvements (and not simply engage in the design of same or apply for a permit for same), Tenant shall keep the Leased Premises insured against loss or damage by fire and flood as well as other perils covered under a standard "All Risk" or "Special Form" policy of insurance, insuring loss or damage to the Leased Premises in the amount of the full replacement value of the Tenant Improvements.
- (g) Beginning on the date that Tenant begins to construct Tenant Improvements (and not simply engage in the design of same or apply for a permit for same), Tenant shall purchase and maintain pollution legal liability (PLL) insurance with coverage, as specified below, for losses arising from or in any way related to sudden and gradual pollution conditions which arise from or in connection with the operations at or use of the Leased Premises:
  - (i) The PLL policy will, at minimum, have a limit of liability of \$5,000,000.00 per loss/claim/occurrence and \$5,000,000.00 aggregate;
  - (ii) The PLL policy will, at a minimum, include coverage for bodily injury, property damage (including restoration or replacement costs), natural resource damage, on and off-site environmental cleanup costs and legal defense costs arising from or in relation to pollution conditions that arise out of pollution conditions on, at under or migrating from the Leased Premises;
  - (iii) Tenant shall maintain the PLL policy or renewals thereof in effect until twenty-four (24) months following the termination of this Lease. The PLL policy shall include coverage for pollution conditions that arise from or in connection with the transportation, by or on behalf of the Tenant, of any waste or waste materials off or away from the Leased Premises;
  - (iv) The PLL policy shall also satisfy the following requirements:
    - A. The PLL policy shall be primary coverage with respect to this Lease and non-contributing with respect to the Landlord's s insurance;

- B. The PLL policy shall be placed with an insurance company with a current A.M. Best's Rating of A-VII or better and such insurance company shall be authorized to do business in the state of New Jersey;
- C. The PLL policy shall contain a Severability of Interest/Separation of Insureds clause;
- D. The PLL policy shall be endorsed to state that coverage shall not be suspended, voided, canceled, reduced in limits or the scope of coverage, as required under this addendum, be materially changed except after sixty (60) days prior written notice has been received by Landlord;
- E. The PLL policy shall contain a waiver of subrogation by the carrier for all claims and suits against Landlord, including recovery of any applicable deductibles;
- F. The PLL policy shall name Tenant as the named insured and Landlord as an additional insured. The Tenant hereby agrees that the addition of any other party or parties to the Policy shall require Landlord's prior written consent. There shall not be any limitations for completed operations to the coverage provided to the additional insureds or named insureds;
- G. The Tenant acknowledges and understands that the purchase and maintenance of the insurance described in this Section shall not release the Tenant from its respective obligations or liabilities in connection with the Lease. Furthermore, the Tenant is responsible for any losses, claims, and costs of any kind, which exceed the limits of liability or which may be outside the coverage scope of the PLL policy required in this Section.
- H. The PLL Policy shall not contain any of the following exclusions or limitations.
  - Bodily Injury or Property Damage including clean-up in soil, surface water and groundwater for lead based paint and asbestos;
  - II. Punitive damages. (The policy shall provide coverage for fines/penalties and punitive damages where allowable by law.);
  - III. Naturally occurring substances;
  - IV. Natural Resource Damages (NRDs); or
  - V. Illicit Abandonment; and
- (h) No policy furnished by Tenant shall have a deductible amount in excess of \$50,000, nor shall Tenant be self-insured for any portion of the coverages required in this Lease.
- (i) To the fullest extent permitted by law, the Tenant Waives all rights against Landlord and their agents, officers, directors, and employees for recovery of damages to the extent these damages are covered by Commercial General Liability, Commercial Umbrella Liability, Business Auto Liability or Workers' Compensation and Employer's Liability insurance maintained per requirements stated above. This Waiver of Subrogation wording shall be included on the Certificate of Liability.

# 31. INDEMNIFICATION.

- (a) Notwithstanding that joint or concurrent liability may be imposed upon Landlord by statute, ordinance, rule, regulation, order, or court decision, Tenant shall, notwithstanding any insurance furnished pursuant hereto or otherwise, indemnify, protect, defend and hold harmless Landlord from and against any and all liability, fines, suits, claims, obligations, damages, losses, penalties, demands, actions and judgments, and costs and reasonable expenses of any kind or nature (including reasonable attorneys' fees) (collectively "Costs"), by anyone whomsoever, due to or arising out of:
- (i) any work or thing done in, on or about the Leased Premises or any part thereof by Tenant or anyone claiming through or under Tenant or its employees, agents, licensees, contractors, servants or subtenants of Tenant or any such person;
- (ii) any use, possession, occupation, condition, operation, maintenance or management of the Leased Premises or any part thereof by Tenant, including, without limitation, any air, land, water or other pollution caused by Tenant;
- (iii) any negligence or wrongful act or omission on the part of Tenant or any person claiming through or under Tenant or the respective employees, agents, licensees, invitees, contractors, servants or subtenants of Tenant or any such person;
- (iv) any accident or injury to any person (including death) or damage to property (including loss of property) occurring in or on the Leased Premises or any part thereof;
- (v) any failure on the part of Tenant to perform or comply with any of the covenants, agreements, terms, provisions, conditions or limitations contained in this Lease on its part to be performed or complied with;
  - (vi) any violation of the Deed Restriction (as defined in Section 24) by Tenant, and
- (vii) any failure on the part of Tenant to maintain any insurance required to be maintained pursuant to Section 30 or to perform or comply with any laws, rules or regulations.
- (b) In case any action or proceeding is brought against Landlord by reason of any of the foregoing, Tenant, upon written notice from Landlord shall, at Tenant's expense, resist or defend or cause to be resisted or defended such action or proceeding. Tenant or its counsel shall keep Landlord apprised at all times of the status of the action or proceeding. At the request of Tenant, Landlord will cooperate with Tenant in any such action or proceeding and will execute any documents and pleadings reasonably required for such purpose, Tenant hereby agreeing to save Landlord harmless from all cost, expense (including attorneys' fees), loss and damage on account of, growing out of, or resulting from, such cooperation. The establishment of limits of coverage for the insurance required by Section 30 shall not serve in any way to limit Tenant's obligations pursuant to this Section. The provisions of Sections 31(a) and (b) shall survive the expiration or termination of this Lease.
- (c) To the extent not covered by insurance, Landlord agrees to indemnify, defend (with counsel reasonably approved by Tenant) and hold Tenant harmless from and against all Costs resulting from any accident or injury to any person or occurring in or on the Premises and resulting solely from the negligence of Landlord or Landlord's agents, employees or contractors; provided, however, the foregoing indemnity shall not include any Costs for which Tenant is otherwise responsible under Paragraphs (a) or (b) of this Section.

32. SECURITY DEPOSIT. An amount equal to two (2) months of the initial Monthly Rent plus two (2) months of the estimated initial Impositions as of the Rent Commencement Date ( "Security Deposit") (reduced by Lease Payments 1, 2 and 3, which shall be credited by Landlord as provided in Section 5(a)) shall be deposited by Tenant with Landlord on or before the Rent Commencement Date to secure the full and faithful performance by Tenant of all the terms, covenants and conditions of this Lease upon Tenant's part to be performed, which sum shall be returned to Tenant without interest after the expiration of the Term, provided Tenant has fully and faithfully carried out all of the terms, covenants and conditions on Tenant's part to be performed (but no such return shall be deemed an estoppel against or an admission by Landlord that Tenant is then in compliance with its obligations). In no event shall Tenant be entitled to credit against any rent due hereunder by virtue of the deposit of such security. In the event of a sale of the Leased Premises, Landlord shall have the right to transfer the security to the vendee for the benefit of Tenant, and Landlord shall be considered released by Tenant from all liability for the return of such security upon transfer thereof to the vendee. In such case, Tenant shall look to the new landlord solely for the return of the security, and it is agreed that this shall apply to every transfer or assignment made of the security to a new landlord. The security deposited under this Lease shall not be mortgaged, assigned or encumbered by Tenant without the prior written consent of Landlord. Tenant shall, on the fifth anniversary of the Rent Commencement Date and every five years thereafter (each, an "Adjustment Date"), deposit with Landlord additional amounts, if necessary, so that the total amount of the Security Deposit hereunder shall at all times be equal to two (2) months of Monthly Rent plus two (2) month's Impositions, in effect on such Adjustment Date.

#### 33. MISCELLANEOUS.

- (a) The parties agree that this Lease may be transmitted between them by facsimile machine or email. The parties intend that faxed or emailed signatures constitute original signatures and that a faxed or emailed Lease containing the signature (original, emailed or faxed) of all the parties is binding on the parties.
- (b) This Lease may be signed in one or more counterparts, each of which will constitute an original and all of which together shall comprise the entire Lease.
- (c) This Lease shall be governed by and construed in accordance with the laws of the State of New Jersey, without giving effect to the conflict of laws provisions thereof.
- (d) Except as may otherwise be expressly provided, there shall be no further liability hereunder between the parties upon the termination of this Lease.
- (e) This Lease may be amended, modified, or supplemented, and any provision hereof waived, only by a written agreement of the Parties hereto.
- (f) If any provision of this Lease is held invalid or unenforceable in any jurisdiction, such provision, shall, as to that jurisdiction, be ineffective to the extent of such invalidity or unenforceability without in any manner affecting the validity or enforceability of such provision in any other jurisdiction or the remaining provisions of this Lease.
- (g) This Lease sets forth the entire agreement between the parties hereto with respect to the subject matter hereof, and supersedes all prior and contemporaneous agreements and undertakings, oral or written, with respect to the subject matter hereof.
- (h) Landlord shall maintain in the strictest confidence, for the sole benefit of Tenant, all information pertaining to the terms and conditions of this Lease, including, without limitation, the financial

terms, Tenant's site design and product design, methods of operation and methods of construction and gas production in accordance with the confidentiality and non-disclosure agreement executed by Landlord and Tenant, dated as of November 4, 2015, with respect to the foregoing ("Landlord's NDA"), an executed copy of which been delivered by each party hereto to the other. Without limiting the prior sentence, without first obtaining the written permission from Tenant, Landlord shall not issue any statements or press releases or respond to any inquiries from the news media regarding such matters without the consent of Tenant. Subject to any contrary provisions of Landlord's NDA and hereof, nothing in this Section shall prohibit sharing or disclosing information with any Party's counsel, accountants or current or prospective investors, purchasers, lenders, or as required by law, provided that the Party sharing or disclosing such information requires the recipient to maintain the confidentiality of such disclosed information. In addition, but without limiting the foregoing, (a) Tenant agrees, on behalf of Tenant and Tenant's employees, agents, contractors, consultants, partners, affiliates, assignees and subtenants, not to disclose the terms of this Lease or the results of any audit of Landlord books and records under this Lease to any third party, except (i) legal counsel to Tenant, (ii) any assignee of Tenant's interest in this Lease or any subtenant of Tenant relative to the Leased Premises (or any portion thereof), (iii) as required by applicable law or by subpoena or other similar legal process, or (iv) for financial reporting purposes; and (b) Landlord agrees, on behalf of Landlord

and Landlord's employees, agents, contractors, consultants, partners, and affiliates, not to disclose the terms of this Lease or the results of any audit of Landlord books and records under this Lease to any third party, except (i) legal counsel to Landlord, (ii) any assignee of Landlord's interest in this Lease, (iii) as required by applicable law or by subpoena or other similar legal process, or (iv) for financial reporting purposes. This Section shall survive the termination or expiration of this Lease.

- shall be excused from its obligations hereunder to the extent caused by a "Force Majeure" event, defined to be acts of God, strikes, lockouts or other industrial disturbances, acts of the public enemy, wars, blockades, insurrections, riots, epidemics, landslides, lightning earthquakes, fires, storms, floods, washouts, arrests, the order of any court of governmental authority having jurisdiction while the same is in force and effect, civil disturbances, explosions, accidents to machinery or lines or pipe, and any other cause of the kind herein enumerated and not reasonably within the control of the Party claiming suspension and which by the exercise of due diligence such Party is unable to prevent or overcome. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations hereunder, such Party (the "Claiming Party") shall give notice and details of the Force Majeure to the other Party as soon as practicable and the Claiming Party shall use good faith efforts to remedy the Force Majeure with all reasonable dispatch. Notwithstanding the foregoing, if either Party's performance is delayed by more than twenty-four (24) months for any reason, the other Party shall have the right to terminate this Lease without any further liability to the non-performing Party, except for fulfillment of obligations previously incurred under this Lease (e.g., outstanding purchase orders, shipments and payment of invoices).
- (j) Landlord agrees to promptly provide Tenant with a copy of any default notices that Landlord receives from any of its lenders or other party holding a mortgage or security interest in the Leased Premises. If Landlord fails to pay any of its obligations secured by a mortgage or other security interest on the Premises when due, Tenant may, at its option, upon prior written notice thereof to Landlord, pay such amount, whereupon Landlord shall reimburse Tenant for the reasonable amount thereof promptly following receipt of an invoice therefor together with such evidence thereof as Landlord may reasonably request.
- (k) Tenant represents, warrants and covenants that Tenant: (i) is not listed on the Specially Designated Nationals and Blocked Persons List maintained by the Office of Foreign Asset Control, Department of the Treasury ("OFAC") pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) ("Order") and all applicable provisions of Title III of the USA PATRIOT ACT (Public Law No. 107-56 (October 26, 2001); (ii) is not listed on the Denied Persons List and Entity List maintained by the

United States Department of Commerce; (iii) is not listed on the List of Terrorists and List of Disbarred Parties maintained by the United States Department of State; (iv) is not listed on any list or qualification of "Designated Nationals" as defined in the Cuban Assets Control Regulations 31 C.F.R. Part 515; (v) is not listed on any other publicly available list of terrorists, terrorist organizations or narcotics traffickers maintained by the United States Department of State, the United States Department of Commerce or any other Governmental Authority or pursuant to the Order, the rules and regulations of OFAC (including without limitation the Trading with the Enemy Act, 50 U.S.C. App. 1-44; the International Emergency Economic Powers Act, 50 U.S.C. Sections 1701-06; the unrepealed provision of the Iraqi Sanctions Act, Publ.L.No. 101-513; the United Nations Participation Act, 22 U.S.C. Section 2349; The Cuban Democracy Act, 22 U.S.C. Sections 60-01-10; The Cuban Liberty and Democratic Solidarity Act, 18 U.S.C. Sections 2332d and 233; and The Foreign Narcotic Kingpin Designation Act, Publ. L. No. 106-201, all as may be amended from time to time); or any other applicable requirements contained in any enabling legislation or other Executive Orders in respect of the Order (the Order and such other rules, regulations, legislation or are collectively called the "Orders"); (vi) is not engaged in activities prohibited in the Orders; or (vii) has not been convicted, pleaded nolo contendere, indicted, arraigned or custodially detailed on charges involving money laundering or predicate crimes to money laundering, drug trafficking, terrorist-related activities or other money laundering predicate crimes or in connection with the Bank Secrecy Act (31 U.S.C. Sections 5311 et seq.).

IN WITNESS WHEREOF the parties hereto have caused this Land Lease Agreement to be executed the dates set forth below.

Witness: Garmen Santings

Date: 5 30/18

Witness: M. Mc Connell

Date: May 30, 2018

RNG ENERGY SOLUTIONS, LLC (Tenant)

Name: SAMES POTER

LINDEN MARINE, L.L.C., (Landlord)

Name: William R Clayton
Title: General Manager

# LIST OF EXHIBITS

| A-1 | LEGAL DESCRIPTION OF THE PROPERTY                                      |
|-----|--|
| A-2 | CONCEPT PLAN – LEASED PREMISES   |
| A-3 | LEGAL DESCRIPTION OF LEASED PREMISES PURSUANT TO SECTION 1(A) OF LEASE |
| В   | PROPERTY DOCUMENTS   |
| C   | DELIVERY CONDITIONS PLAN   |
| D   | COPY OF LSRP LETTER  |
| E   | FORM OF RAILROAD CROSSING AGREEMENT                                    |
| F   | COPY OF DEED RESTRICTION   |
| G-1 | MEMORANDUM OF LEASE  |
| G-2 | FORM OF TERMINATION OF MEMORANDUM OF LEASE                             |
| Н   | FORM OF ACCESS EASEMENT  |



# Linden Renewable Energy, LLC Anaerobic Digester to Renewable Natural Gas Project City of Linden, Union County, NJ

# **Environmental Permits/Approvals/Consultations**

#### **Federal**

FAA Determination of No Hazard

US Coast Guard Office of Homeland Security Consultation

US Fish and Wildlife Service Consultation

**NOAA National Marine Fisheries Service Consultation** 

US Army Corps of Engineers, Nationwide Permit #7

# State of New Jersey

NJDEP Waterfront Development Permit

NJDEP 401 Water Quality Certification

NJDEP Water Quality Management Plan Consistency

NJDEP Flood Hazard Area Individual Permit

NJDEP Flood Hazard Area Verification

Tidelands License /Grant application (if needed)

NJDEP DF&W - Natural Heritage Program Consultation

NJ State Historic Preservation Determination

NJDEP Division of Solid and Hazardous Waste - Class C Approval

NJDEP State Subchapter 8 Air Permit

NJDEP Division of Water Quality NJPDES Surface Water Discharge Permit

NJDEP Bureau of Non-Point Pollution Control NJPDES RFA and SWPP Plan

## **Union County**

Union County Planning Board (if required)

Union County Improvement Authority – SWM District Inclusion

New Jersey American-Water Main Extension

Somerset-Union County Soil Conservation District Soil Erosion and Sedimentation Control Plan

Linden-Roselle Sewer Authority Non-Domestic Wastewater Discharge Permit

## **City of Linden**

City of Linden Preliminary/Final Land Development approval from Town Planning Board

City of Linden Redevelopment Plan Approval

City of Linden Subdivision Approval





# City of Linden

Union County, New Jersey

CITY HALL - OFFICE OF THE MAYOR 301 NORTH WOOD AVENUE LINDEN, NEW JERSEY 07036-4296

> TELEPHONE (908) 474-8493 Fax: (908) 474-8497

December 3, 2019

Daniel P. Sullivan, Executive Director Union County Utilities Authority 1499 Routes 1 & 9 North Rahway, New Jersey 07065

Subject: Linden Renewable Energy, LLC UCUA Application

Dear Director Sullivan:

The purpose of this correspondence is to notify the Union County Utilities Authority that the City of Linden fully supports the renewable natural gas project being developed by Linden Renewable Energy, LLC ("LRE") on Tremley Point. When complete, the LRE Project will consist of an anaerobic digester facility that converts organic waste streams into renewable natural gas, as well as organic liquid fertilizer and soil amendment.

The anaerobic conversion process employs organic waste streams consisting of food waste, grocery store waste, restaurant waste and food processing waste.

Accordingly, subject to the execution of all requisite agreements with the City, as well as the associated regulatory permits and approvals, we fully support the inclusion of LRE's Project and property in Union County's Solid Waste Management Plan as a Class C Recycling Facility in accordance with N.J.A.C. 13:1E-99.34b.

The proposed Project provides significant quantifiable benefits important not only to our City, but also Union County, including, but not limited to increasing the City's annual revenue yield with a sustainable energy project which produces a cost effective and environmentally responsible alternative for managing the volume of organic wastes generated within the City. The 4900 Tremley Point Road site is completely compatible with the siting of a Class C Recycling Facility in that it possesses distinct qualities and characteristics, such as:

- 1. Availability of Multi-modal Arthur Kill, CSX Rail and NJ Turnpike access;
- 2. Meeting City Zoning Codes;
- 3. Achieving Environmental Compliance via final remediation of the Site; and,
- 4. Advancing the City's sustainability initiatives.

The City is prepared to act expeditiously and work cooperatively with RNG to further the development of the site for a Class C Recycling Facility.

I welcome any questions and or need for any clarification regarding the City's support of the RNG Energy Solutions proposed redevelopment of the Site as a Class C Recycling Facility utilizing a large anaerobic digester.

Sincerely,

Derk Climpteal

Derek Armstead

Mayor, City of Linden