

PERMIT TO CONSTRUCT AND OPERATE

PERMITTEE: B&R Corporation
FACILITY NAME: Supreme Energy and Recycling
FACILITY ADDRESS: 49 DePaolo Drive, Southington, CT
PERMIT No. Permit No.

Pursuant to Section 22a-208a of the Connecticut General Statutes (“CGS”) and Section 22a-209-4 of the Regulations of Connecticut State Agencies (“RCSA”), a PERMIT TO CONSTRUCT AND OPERATE (“Permit”) IS HEREBY ISSUED by the Commissioner of Energy and Environmental Protection (“Commissioner”) to B&R Corporation (“Permittee”) to construct and operate a solid waste Volume Reduction Plant composting through anaerobic digestion source separated organic materials, processing clean wood and composting leaves and grass clippings (“Facility”) located at 49 DePaolo Drive, Southington, Connecticut.

A. GENERAL TERMS AND CONDITIONS

1. a. This Permit is based on and incorporates by reference pertinent and appropriate sections of documents and specifications submitted as part of Application No. 201303057 for a Permit to Construct and Operate, including:
 - i. Application form received on June 7, 2013, resubmitted in its entirety on December 20, 2013 and January 9, 2015;
 - ii. Operation and Management Plans (“O&MP”) addressing: Site-wide operations, Anaerobic Digestion, Clean Wood Processing and Leaf Composting dated December 2013 revised December 2014;
 - iii. Anaerobic Digestion O&MP revised Section 4. Process Flow and State of Feedstock, dated August 3, 2015;
 - iv. Two (2) sets of revised engineering drawings received on January 29, 2015: Thirty-three (33) engineering drawings depicting the Anaerobic Digester, prepared and P.E. certified by Alan R. Johnson, P.E. Quasar Energy Group and sixteen (16) engineering drawings depicting the overall Facility, prepared and P.E. certified by George F. Andrews, Jr. P.E., Loureiro Engineering Associates, Inc. (“LEA”);
 - v. Letters to the Department of Energy and Environmental Protection (“Department”) from LEA dated January 9, 2015 and November 4, 2015 responding to Department staff’s review comments;
 - vi. Revised Quasar engineering drawings G-2, G-4, A-4 and P-4 received on November 6, 2015; and
 - vii. Letter to the Department, from LEA dated November 18, 2015, received November 23, 2015 including a revised Storage Capacities Table dated November 18, 2015 and revised engineering drawings entitled “Site Plan, C-1.0” dated January 9, 2015, revisions January 29, 2015, October 28, 2015 and November 18, 2015 and “Site Plan Leaf Composting Activities, C.1.2” dated December 20, 2013, revisions January 9, 2015, October 28, 2015 and November 18, 2015, prepared and P.E. certified by George F. Andrews Jr.

- b. The Permittee shall maintain at the Facility and have available for reference by Facility staff and inspection by the Commissioner:
 - i. All documents or copies of such documents submitted as Application No. 201303057 and any document submitted in support of said application for the life of this Permit; and
 - ii. A copy of this Permit and the Facility's Facility Plan which consists of the Operation and Management Plan and the engineered drawings which describe the Facility and its operations; and
 - c. The Permittee shall for the life of this Permit, provide to the Department notification within thirty (30) days of any changes in the information provided as part or in support of the application on which this Permit was based. Any inaccuracies found in the information submitted by the Permittee may result in revocation, reissuance, or modification of this Permit and civil or criminal enforcement actions.
2. As used in this Permit, the following definitions apply:
- “Anaerobic digestion” or “AD” means the process of controlled decomposition of source separated organic material in the absence of oxygen to produce biogas and Digestate.
- “Aspergillus fumigatus” is a species of the fungus Aspergillus that may be produced during the composting process.
- “CFR” means the Code of Federal Regulations in effect the date this Permit is issued.
- “Certified operator” means the solid waste facility operator or an employee of such operator who is present at the facility and oversees or carries out the daily operations authorized through this Permit, and whose qualifications are currently certified in accordance with Section 22a-209-6 of the RCSA
- “Clean wood” as defined in Section 22a-208a-1 of the RCSA means any wood which is derived from such products as pallets, skids, spools, packaging materials, bulky wood waste, or scraps from newly built wood products, provided such wood is not treated wood as defined in Section 22a-209a(a)(2) or demolition wood waste. For the purposes of this Permit, Clean wood may also include Land clearing debris.
- “Commingled Recyclables” means a combination of metal, glass, and plastic containers, or mixed paper.
- “Commissioner” means the Commissioner of Energy and Environmental Protection.
- “Compost pad” as defined in Section 22a-2-8i(a)-1 of the RCSA means a cleared, graded surface within a leaf composting facility upon which windrows are placed for composting.
- “Day” means calendar day.
- “Department” means the Department of Energy and Environmental Protection.

“Designated Recyclable Item” means an item designated for recycling by the Commissioner in regulations adopted pursuant to subsection (a) of Section 22a-241b or designated for recycling pursuant to Section 22a-256 or 22a-208v of the CGS.

“Digestate” means the material resulting from the Anaerobic digestion of source separated organic materials and fats, oils and grease.

“Facility generated recyclables” means Recyclable Items that are generated by the de-packaging of packaged Source-separated organic material.

“Fats, oils and grease” or “FOG” means any fats, oils and grease generated by industrial and commercial food preparation processes.

“Final Products” means digestate, clean wood, and composted leaves and grass clippings, which are ultimately delivered to a market.

“Grass clippings” means plant material produced as a result of mowing a lawn.

“Land clearing debris” as defined in Section 22a-208a-1(19) of the RCSA means trees, stumps, branches or other wood generated from clearing land for commercial or residential development, road construction, routine landscaping, agricultural land clearing, storms, or natural disasters.

“Leaf composting” or “composting of leaves” as defined in Section 22a-208i (a)-1 of the RCSA means the accelerated aerobic biodegradation and stabilization of leaves under controlled conditions.

“P.E.” means Professional Engineer licensed in the state of Connecticut.

“Processing” means the practice by which either the physical characteristics or the volume of solid waste accepted at the Facility is being altered through separating, sorting, baling, shredding, crushing, grinding, chipping, compacting, consolidation, anaerobic digestion, composting, transfer or reworking as part of recycling and/or volume reduction operations.

“Recyclable items” are materials which are designated for recycling pursuant to Section 22a-241b of the CGS or Sections 22a-241b-1 to 22a-241b-4 of the RCSA or which may be recovered from the solid waste stream and for which there is a demonstrated market for reuse or that may be beneficially used in the production of other products.

“Source-separated organic material” or “SSOM” as defined in Section 22a-207(29) of the CGS means organic material, including, but not limited to, food scraps, food processing residue and soiled or unrecyclable paper that has been separated at the point or source of generation from nonorganic material.

“SSOM Residue” means all solid waste that remains after the recovered materials have been extracted from the SSOM, clean wood, leaves and grass clippings authorized for processing at the Facility. SSOM Residue shall not include the solid waste derived through the de-packaging processing of Packaged SSOM at the Facility.

“Treated Wood” as defined in Section 22a-209a(a)(2) of the CGS means wood which contains an adhesive, paint, stain, fire retardant, pesticide or preservative.

“Windrow” as defined in Section 22a-208i(a)-1 of the RCSA means an elongated pile of leaves formed for the purpose of composting.

3. The Permittee shall comply with all terms and conditions of this Permit. This Permit consists of the conditions contained herein and the specifications contained in the application documents, except where such specifications are superseded by the more stringent conditions contained herein. Violation of any provision of this Permit may be subject to enforcement action pursuant, but not limited, to Sections 22a-6, 22a-208, 22a-225 and 22a-226 of the CGS.
4. The Permittee shall make no changes to the specifications and requirements of this Permit, except in accordance with law.
5. To the extent that any term or condition of this Permit is deemed to be inconsistent or in conflict, with any term or condition of any Permit previously issued for this Facility, including any modifications thereto, or with any data or information contained in the application, or any other documents incorporated by reference in this Permit, the term or condition of this Permit shall control and remain enforceable against the Permittee.
6. The Permittee shall submit for the Commissioner’s review and written approval all necessary documentation supporting any proposed physical and/or operational upgrades, improvements and/or minor changes in the Facility design, practices or equipment. The Commissioner may issue a written approval only if, in the Commissioner’s judgment, the proposed physical and/or operational upgrades, improvements and/or minor changes: (a) are deemed necessary for a better and more efficient operation of the Facility; (b) do not significantly change the nature of the Facility, or its impact on the environment; and (c) do not warrant the issuance of a permit or authorization pursuant to Section 22a-208 of the CGS.

B. AUTHORIZATION TO CONSTRUCT AND MAINTAIN

1. The Permittee is authorized to construct the Facility in accordance with all applicable law, including this Permit. The Facility shall consist of three (3) separate solid waste management areas consisting of an Anaerobic digester which incorporates pulping and de-packaging activities, a Clean wood processing area, and a leaf and grass clipping composting area. The three solid waste management areas shall be constructed as follows:
 - a. Anaerobic Digestion System that consists of the following:
 - i. A 1,600 square foot operations building, housing the Facility office and laboratory;
 - ii. A 750,000 gallon Anaerobic Digester/dual purpose tank;
 - iii. A 230,000 gallon Equalization tank;
 - iv. A 12,000 gallon underground Dilution tank;
 - v. Two (2) 12,000 gallon underground concrete liquid SSOM receiving tanks;

- vi. A 784 square foot clean solids SSOM receiving pit with a thirty (30) cubic yard (cy) vertical feed mixer hopper which includes a feedstock grinder, SSOM receiving discharge hopper, and macerator with integrated rock catcher; and
 - vii. A 10,000 square foot building of which 4,000 square feet is dedicated to the pulping and de-packing (P&D) activity. The P&D area includes the following equipment and other features: a Wackerbauer Separation Mill TM 75 which has a processing capacity of fourteen (14) to twenty-four (24) tons per hour, a pump feeding tank with discharge screw conveyor, a thirty (30) cy receiving hopper/vault which is open and exposed at the ground surface, a funnel hopper; a 12,000 gallon underground tank for pulped SSOM; a conveyor for digestate solids; and storage area(s) for packaged food, Facility generated recyclables, digestate solids and SSOM residue;
- b. Clean Wood Processing areas consisting of:
- i. Two (2) Clean wood storage and processing areas (“CWP”), identified as CWP#1 (existing) and CWP#2 (to be established);
 - ii. CWP #1, which is located on a 1.99 acre portion in the northwest corner of the 37.24 acre parcel owned by the Permittee. CWP #2 is located on a 1.49 acre portion of a 19.33 acre parcel leased by the Permittee from the Town of Southington, and such activity is located on the northern end of the Town’s closed landfill;
 - iii. CWP#2, for which the base pads shall be constructed with compacted and well-drained soil; at least two (2) feet in thickness; be sloped at three to five percent (3%-5%) to promote drainage and designed to support heavy equipment during all seasons;
 - iv. Outdoor storage areas for processed clean wood, which shall be constructed with a two to three percent (2%-3%) slope; at least two (2) feet thick, constructed of compacted, well drained materials, and designed for heavy equipment use during all seasons; and
 - v. Clean wood processing shall use one or more of the following processing equipment: shredders, grinders, chippers, loaders, backhoe, dozer, and excavators;
- c. Composting of leaves and grass clippings areas shall consist of:
- i. The existing composting area comprises 4.77 acres of the Facility;
 - ii. The composting pad is constructed of well-drained materials, designed for heavy equipment use in all seasons, has a slope between two and five percent (2-5%); and is graded and maintained to minimize ponding;
 - iii. The composting area shall have a maximum of ten (10) windrows not to exceed twelve (12) feet in height and twenty (20) feet in width at their base, constructed on the compost pad perpendicular to the contours of the ground surface and sufficient aisle space to allow for access of heavy equipment; and
 - iv. The composting activity shall use one or more of the following of processing equipment: loaders, excavators, water truck, high tip bucket, shredders and grinders.

2. The Permittee is authorized to construct the Facility's solid waste management areas noted in B.1. of this Permit for the purposes of receiving and processing no more than a total of the following at each of the solid waste management areas:
 - a. Anaerobic Digestion: 144 tons per day (tpd) of SSOM, received for processing at the clean solids SSOM and the liquid SSOM receiving areas; and 336 tpd of packaged SSOM or commingled source separated organic material received for processing at the pulping and de-packaging building;
 - b. Clean Wood Processing: 500 tpd of Clean wood including Land clearing debris received for processing; and
 - c. Composting: 100 tpd of leaves and grass clippings received for processing.
3. The Permittee is authorized to maintain the Facility as described in Condition No. B.1 of this Permit.
4. The Permittee shall control dust, odors, water discharges and noise resulting from the construction and maintenance of the Facility at all times to assure compliance with applicable requirements of the RCSA, and any other applicable laws, including OSHA.
5. The Permittee shall, within thirty (30) days from the completion of the construction, as described in Condition B.1. above, submit a written notification for the Commissioner's review and written approval. Such notification shall include at a minimum:
 - a. P.E. certified statement that the construction of the Facility has been completed as approved;
 - b. P.E. certified as-built drawings; and
 - c. A request for written authorization from the Commissioner to operate in accordance with Condition Nos. C. 4. and C. 5. of this Permit.

C. AUTHORIZATION TO OPERATE

1. The Permittee is authorized to operate any or all of the components specified in Condition No. B.1. of this Permit, upon written approval granted by the Commissioner. Such written approval shall be issued after the Permittee is deemed in full compliance with, but not limited to, the requirements of Condition No. B.5. of this Permit.
2. The Permittee shall not exceed the processing and storage limits established by this Permit. Solid waste, other than those listed herein, shall not be accepted, processed, treated, stored, transported, disposed on-site, or otherwise managed at the Facility without prior written approval of the Commissioner.
3. The Permittee is authorized to operate the Facility in accordance with all applicable law, including this Permit. Unless otherwise approved in writing by the Commissioner or limited by local authorities, the Permittee is authorized to operate as follows:

Anaerobic Digestion: Receive for processing SSOM, Monday through Friday 7:00 a.m. to 5:00 p.m. and Saturday 7:00 a.m. to 5:00 p.m.; and process SSOM twenty-four (24) hours per day seven (7) days a week; and

Clean Wood Processing and Composting of leaves and grass clippings: Receive and process Monday through Friday 7:00 a.m. to 5:00 p.m. and Saturday 7:00 a.m. to 5:00 p.m.

4. The Permittee is authorized to receive and process at each of the Facility's solid waste management areas no more than the daily limits specified below:
 - a. Anaerobic Digestion: (i) 144 tpd of SSOM received at the clean solids (>12% solids content) and liquid (\leq 12% solid content) SSOM receiving areas; and (ii) 336 tpd of package SSOM or commingled source separated organic material at the pulping and de-packaging building;
 - b. Clean Wood Processing: 500 tpd of clean wood including land clearing debris; and
 - c. Composting: 100 tpd of leaves and grass clippings at the composting area.

5. The Permittee shall store and manage solid waste at the Facility only in the designated areas as identified in the engineering drawings referenced in Condition No. A.1.a. of this Permit and in accordance with the table below. Fully loaded containers of solid waste shall be transferred from the Facility within two (2) business days.

Storage Table

Storage Areas¹	Feedstock Anaerobic Digestion - SSOM Clean Wood Leaves and Grass Clippings	Volume Cubic Yards	Storage Specifications and Comments
A	SSOM	1,139	230,000 gallon - Equalization Tank
B	SSOM	3,713	750,000 gallon - Anaerobic Digester/dual purpose tank
C	Liquid SSOM (\leq 12% solids content)	119	Liquids Receiving Area
D	Clean Solids SSOM ($>$ 12% solids content)	30	Clean Solids SSOM receiving pit
E	Packaged SSOM and/or Commingled SSOM (unpackaged SSOM containing inorganic materials)	30	Receiving pit located within the pulping and de-packaging building
F	Packaged SSOM	167	Stored within the pulping and de-packaging building
G-1	Digestate Filtrate (liquid fraction of digestate)	59	12,000 gallon underground Dilution tank
G-2	Liquid SSOM	59	12,000 gallon underground Pulp tank for processed (feedstock slurry) packaged SSOM
H	Facility generated recyclables (plastic, paper and metal) and/or Residue	Combined total 30	Stored in containers within the pulping and de-packaging building
I	Digestate Solids	90	Stored in containers within the pulping and de-packaging building
J	Unprocessed Clean Wood	28,001	Located at CWP#1
K	Processed Clean Wood	8,066	Located at CWP#1
L	Unprocessed Clean Wood	26,923	Located at CWP#2
M	Processed Clean Wood	7,766	Located at CWP#2
N	Leaves and Grass Clippings	27,000	Maximum storage on the compost pad

¹ As identified on the engineering drawings referenced in Condition No. A.1.a. of this Permit.

a. **Anaerobic Digestion**

The Permittee shall ensure that:

- i. All SSOM which includes: liquid SSOM, packaged SSOM, clean solids SSOM and commingled SSOM are managed in enclosed containers, indoors or using systems so as to inhibit and/or mitigate generating off-site odors and attracting vectors;
 - ii. Storage and management of SSOM as received, is conducted at three (3) dedicated receiving areas (liquid SSOM, clean solids SSOM and pulping and de-packaging), five (5) tanks (anaerobic digester, equalization, two (2) liquid, pulp) and one dilution tank for digestate filtrate:
 - (A) Two (2) underground liquids receiving tanks, maximum combined storage 24,000 gallons;
 - (B) Clean solids pit, maximum storage thirty (30) cubic yards ;
 - (C) Pulping and de-packaging receiving pit and tipping floor, maximum storage 197 cubic yards;
 - (D) Anaerobic digester, maximum storage 750,000 gallons;
 - (E) Equalization tank, maximum storage 230,000 gallons;
 - (F) Pulp tank, maximum storage 12,000 gallons; and
 - (G) Dilution tank, maximum storage 12,000 gallons;
 - iii. SSOM is processed on a first in/first out basis and shall have all non-organic materials removed prior to being fed into the Anaerobic digestion system;
 - iv. Digestate solids are:
 - (A) Stored in containers within the pulping and depackaging building and shall not exceed ninety (90) cubic yards;
 - (B) Transferred from the Facility within forty-eight (48) hours, of dewatering with the exception of legal holiday weekends;
 - (C) Transferred from the Facility to markets, recycling facilities and/or other solid waste facilities which are authorized to accept such solid waste for recycling, which may include, but is not limited to composting and soil blending; and
 - (D) Not incinerated, unless approved in writing by the Commissioner; and
 - v. That negative air pressure is maintained within the pulping and depackaging building and that the doors remain closed except when trucks are entering or exiting the building.
- b. **Clean Wood Storage and Management:** Storage of clean wood (brush; land clearing debris,) shall take place in either container(s) or in piles located on the ground in the areas identified on the engineering drawings referenced in Condition No. A.1.a. of this Permit.

Piles of unprocessed clean wood shall: have a minimum of a twenty-five (25) foot emergency access maintained around them; a maximum height of twenty-five (25) feet, not contain treated wood; be processed and transferred on a first-in/first-out basis. Unprocessed clean wood stored in designated areas at the Facility shall not exceed 28,001 cubic yards at CWP#1 and 26,923 cubic yards at CWP#2.

Piles of processed clean wood chips stored at the Facility in designated areas shall not exceed 8,066 cubic yards at CWP#1 and 7,766 cubic yards at CWP#2. Piles of processed clean wood shall have a maximum height of fifteen (15) feet; be stored on base pads constructed of compacted and well drained material that can support heavy equipment during all seasons; minimize dust and prevent ponding of water; be shaped to allow adequate stormwater run-off; be

oriented (for elongated piles) perpendicular to the contours of the ground surface; be located in a clearly marked area equipped with stormwater run-on/run-off controls which comply with all existing permits and/or any applicable stormwater management requirements of Section 22a-430 and Section 22a-430b of the CGS.

- c. **Wood chipping activities** shall comply with the requirements of Sections 22a-174-18, 22a-174-23 and 22a-174-29 of the RCSA; and shall not generate noise, dust, fumes, smoke, vibrations or odors that exceed background levels thereof at any boundary of the property on which the Facility is located. Wood chipping activities conducted on top of the landfill (closed in accordance with Sections 22a-209-1 through 13 of the RCSA) at CWP#2 shall take place on a base pad to prevent disruption of the landfill cap and underlying solid waste. The base pad shall be: constructed of compacted and well-drained soil; designed to support heavy equipment during all seasons; at least two (2) feet in thickness (as required by Sections 22a-209-7(1) and 13(e) of the RCSA); and be sloped at 3%-5% to promote drainage.
- d. **Composting (leaves and grass clippings)**
- i. The Permittee shall store and manage leaves and grass clippings in the area identified on the engineering drawing referenced in Condition No. A.1.a. of this Permit and accordance with Section 22a-208i(a)-1 of the RCSA.
 - ii. The Permittee is authorized to construct and manage a maximum of ten (10) windrows in accordance with the following:
 - (A) The windrows shall not exceed twelve (12) feet in height and twenty (20) feet in width at their base;
 - (B) The total volume materials being composted on the compost pad shall not exceed 27,000 cubic yards; and
 - (C) The windrows shall be oriented on the compost pad perpendicular to the contours of the ground surface and the layout shall allow for access of heavy equipment.
 - iii. The Permittee shall:
 - (A) Minimize dust emissions from stationary and mobile equipment;
 - (B) Maintain a moisture content within the windrows between forty percent (40%) and sixty percent (60%), for optimal composting and in order to minimize *Aspergillus Fumigatus* ("AF") and dust releases during windrow turning. Should moisture content drop below the forty percent (40%) level, windrows shall be watered sufficiently just prior to turning to control AF and dust;
 - (C) Measure and record the internal temperature of the windrows at least once every fourteen (14) days at fifty (50) foot intervals along the windrows. The thermometer shall be inserted into the center of the windrow when internal temperature is being measured; and
 - (D) At least once every two (2) weeks record the following parameters during windrow turning: weather conditions, wind direction, ambient air temperature, presence of odor or dust, compost pad condition, windrow moisture, corrective actions needed, and corrective actions taken. Such inspection shall be maintained by the Permittee for the life of the Permit and provided to the Commissioner upon request.
 - iv. The Permittee shall receive, store and manage grass clippings in accordance with the following:
 - (A) Receipt, management and composting of grass clippings shall take place at least 1,000 feet from any occupied building other than an owner occupied building at which the facility is located;

- (B) The Facility shall maintain a turned windrow method of composting;
- (C) Grass clippings received in plastic bags, including but not limited to biodegradable plastic bags, shall be emptied from such bags on the same day as receipt;
- (D) Grass clippings received in paper bags shall be shredded or broken open on the same day as receipt and at no time shall bagged grass clippings be incorporated directly into a windrow;
- (E) Prior to blending grass clippings into windrows the Permittee shall ensure that the interior of the windrow is of a high enough moisture content between forty-five (45) and fifty (50) percent;
- (F) Grass clippings shall be thoroughly blended with leaves on the day of receipt in a ratio by volume of one-part grass clippings to not less than three parts leaves. The receipt of grass clippings shall immediately cease when there is an insufficient leaves to maintain the ratio;
- (G) Grass clippings shall not be stockpiled overnight;
- (H) The addition of grass clippings shall not interfere with the operation and maintenance of the Facility; and
- (I) The addition of grass clippings shall not cause nuisance odors as defined in Section 22a-174-23 of the RCSA.

6. The Permittee shall:

- a. Store solid waste on-site in conformance with proper fire control measures. Routine maintenance and inspections of all fire control equipment shall be conducted in accordance with manufacturer's specifications;
- b. Ensure that all solid waste accepted at the Facility is properly managed on-site, processed, stored and transported to markets or other solid waste processing or disposal facilities authorized to accept such solid waste;
- c. Process loads of SSOM, clean wood, leaves and grass clippings and segregate any non-organic materials from organic materials to be processed through anaerobic digestion, composting and wood chipping. Any Facility Generated Recyclables and/or SSOM Residue shall be transferred from the Facility to recycling markets or facilities authorized to receive and process such solid waste. The Permittee shall determine and report to the Commissioner, for each quarter of operations, the percent contamination rate in incoming loads of SSOM by weight.
- d. Ensure that any unauthorized solid waste inadvertently received, or solid waste which is unsuitable for processing at the Facility is: (i) immediately sorted, separated, isolated and temporarily stored in a safe manner prior to off-site transport; (ii) recorded and reported in the quarterly report required by Condition No. C.10. of this Permit; and (iii) disposed at a facility authorized to accept such solid waste. No more than thirty (30) cubic yards of unacceptable solid waste shall be stored on-site unless authorized in writing by the Commissioner. A spare container may be made available for any storage emergency at the Facility;
- e. Provide expeditious notification regarding any emergency incident (explosion, accident, fire, release, or other significant disruptive occurrence) which: (i) significantly damaged equipment or structures; (ii) interrupts the operation of the Facility for greater than twenty-four (24) hours; (iii) results in an unscheduled

Facility shutdown or forced diversion of solid waste to other solid waste facilities; (iv) could reasonably create a source of pollution to the waters of the state; or (v) otherwise threatens public health.

Such notification shall be: (i) be immediately conveyed to the Commissioner using the 24-hour emergency response number (860) 424-3338 or the alternate number (860) 424-3333 and in no event later than twenty-four (24) hours after the emergency incident; (ii) verified to the Solid Waste Program in the Waste Engineering and Enforcement Division of the Bureau of Materials Management and Compliance Assurance by phone at (860) 424-3366, or at another current publicly published number for the Solid Waste Program, or by facsimile at (860) 424-4059; (iii) followed by a written report no later than the fifth business day after the emergency incident detailing the cause and effect of the incident, remedial steps taken and emergency backup used or proposed to be implemented; and (iv) be recorded in a log of emergency incidents. In addition to the notification requirements above, the Permittee shall comply with all other applicable reporting or notification requirements regarding the emergency incident including but not limited to, reporting required by Section 22a-450 of the CGS;

- f. Prevent the spillage of solid waste from transfer containers during on-site management, storage and off-site transfer. Each loaded container shall be covered before transfer off-site and the haulers shall be instructed to keep the containers covered during off-site transportation;
- g. Operate the Facility in a safe manner so as to control fire, odor, noise, spills, vectors, litter and dust emission levels in continuous compliance with all applicable requirements, including OSHA. The Facility's premises shall be maintained and any litter shall be removed on a daily basis;
- h. Ensure that the manufacturer's operation and maintenance manuals for each major piece of fixed or mobile processing equipment, (which may include, but not be limited to, grinders; conveyors; separation mill; and storage tanks) installed or used at the Facility are available for review by the Commissioner;
- i. Determine through observation that incoming loads of SSOM do not contain greater than ten percent (10%) by volume ("threshold contaminant percentages") of designated recyclable items. For any loads identified that exceed the threshold criteria for load contamination specified in this condition the Permittee shall document each load in the daily log and report those to the Department in the quarterly reports required by this Permit. The Permittee shall also provide notice to the hauler in accordance with Condition No. C. 6. k.v.
- j. Manage solid wastes in such a manner that all recyclable materials are segregated so that no other solid waste may cause contamination or degradation of the recyclable product, or result in any negative impact on the recyclability of such material;

- k. Conduct periodic unannounced inspections of truck loads delivered to the Facility, pursuant to Section 22a-220c(b) of the CGS. The inspections shall be performed for a minimum of five percent (5%) of the monthly truck loads received that are representative of the waste types authorized for receipt at the Facility. Records of such inspections shall be maintained at the Facility for the life of the Permit or such other timeframe specified in writing by the Commissioner. The inspections and supporting documentation shall consist of at a minimum:
 - i. Photographs of each load of SSOM inspected that exceeds the threshold contaminant percentages as specified in Condition No. C.6.i. of this Permit and each load of source separated recyclable items that exceeds five percent (5%) by volume of non-recyclable wastes;
 - ii. Origin of each load (municipality; regional facility and whether commercial or residential);
 - iii. Waste transporter company name;
 - iv. Estimated percentage of contaminant(s) present in each load and identification of each type; and
 - v. Immediate written notifications to the hauler, municipality in which the solid waste was generated and/or regional facility for each load that exceeds the threshold contaminant percentages specified in Condition No. C.6.i. of this Permit.
- l. The Permittee shall determine the SSOM Residue as an average contaminant rate based on the first four consecutive quarters of operations at the Facility. Within ninety (90) days after the fourth complete quarter of operations, the Permittee shall implement steps to reduce the baseline contamination rate of non-organic materials in incoming loads of SSOM excluding Package SSOM. On or before the eighth complete quarter of operations, the Permittee shall have achieved a decrease by thirty percent (30%).

The Permittee shall document in the quarterly report and the year-end report the efforts and actions implemented to reduce the baseline contaminant rate in SSOM received at the Facility.

7. The Permittee shall have an operator, certified pursuant to Section 22a-209-6 of the RCSA, present at all times during Facility operation. All individuals under the supervision of such certified operator shall have sufficient training to identify solid waste received at the Facility which is not permitted to be received, or is unsuitable for processing, and shall take proper action in managing such solid waste.
8. The Permittee shall prominently post and maintain a sign at the Facility entrance pursuant to 22a-209-10(3) of the RCSA that includes the Facility's name and the Department Permit number (Permit to Construct and Operate No. _____) issuance date and expiration date. Such sign shall also include a phone number that provides the general public the ability to register questions or complaints twenty-four (24) hours per day. The Permittee shall maintain a log of all calls received and how such calls were addressed or resolved. The Permittee shall also post a sign in accordance with Section 22a-636 of the CGS.

9. The Permittee shall: (a) control all traffic related to the operation of the Facility in such a way as to mitigate queuing of vehicles off-site and any excessive or unsafe traffic impact in the area where the Facility is located; (b) unless otherwise exempted, ensure that vehicles are not left idling for more than three (3) consecutive minutes pursuant to Section 22a-174-18(b)(3) of the RCSA; (c) prominently post and maintain signs limiting such vehicle idling time within the Facility.
10. The Permittee shall maintain daily records as required by Section 22a-209-10(13) of the RCSA and Sections 22a-208e and 22a-220 of CGS. Based on such records, the Permittee shall prepare monthly summaries including, but not limited to, the following information as it pertains to solid waste:
 - a. Type and quantity of solid waste received, including all SSOM, clean wood, leaves and grass clippings, Facility Generated Recyclables, Recyclable items, SSOM Residue, unauthorized solid waste and/or universal waste;
 - b. Origin of waste load (municipality name; regional facility name) and waste hauler name;
 - c. Destination to which solid wastes, Digestate solids, Facility Generated Recyclables, including all Recyclable Items, and unauthorized solid waste from the Facility were delivered for disposal or recycling, including quantities delivered to each destination; and
 - d. All daily logs (including documentation related to the unannounced inspections of truck loads) shall be maintained for the life of this Permit or such other timeframe specified in writing by the Commissioner.

The monthly summaries required pursuant this condition shall be submitted quarterly no later than January 31, April 30, July 31, October 31, of each year on up-to-date forms prescribed by the Commissioner directly to the Solid Waste Program, Waste Engineering and Enforcement Division, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127.

11. The Permittee shall ensure that all clean wood received at the Facility is inspected for signs of the presence of the Asian Longhorn Beetle and the Emerald Ash Borer. Signs indicating possible Asian Longhorn Beetle infestation can be found at the CT DEEP webpage: <http://www.ct.gov/deep/alb>
Signs indicating possible Emerald Ash Borer infestation can be found at the CT DEEP webpage: <http://www.ct.gov/deep/eab>
 - a. The Permittee shall ensure each load of clean wood is visually assessed for possible pest infestation as part of the on-site routine inspections.
 - b. Any clean wood suspected of being infested by either the Asian Longhorn Beetle or the Emerald Ash Borer should be identified at the source of generation and managed in accordance with existing quarantine agreements.
 - c. If signs of infestation are observed:
Digital photos and careful identification notes must be provided to the [Connecticut Agricultural Experiment Station](#) (Deputy State Entomologist direct phone line: 203-974-8474; and e-mail CAES.StateEntomologist@ct.gov).
 - i. The infested clean wood shall be: segregated from other clean wood; marked as segregated; securely stored and kept reasonably intact.

- ii. Any handling activities (e.g. chipping and moving) shall be postponed until an investigator from, or designated by, the Connecticut Agricultural Experiment Station, has examined the potentially infested clean wood.
 - iii. Any truck load tickets and other documentation of deliveries shall note whether a pest infestation assessment has been conducted.

- 12. Nothing herein authorizes any person, municipality or authority to hinder municipal or regional solid waste recycling efforts. All activities conducted by the Permittee at the Facility shall be in accordance with this Permit and consistent with the state-wide Solid Waste Management Plan, pursuant to Sections 22a-228 and 229 of the CGS.

- 13. The Permittee shall, no later than sixty (60) days after the issuance of the written authorization to operate, pursuant to Condition No. B.5. of this Permit, establish for the Commissioner's benefit an acceptable financial assurance instrument and post the financial assurance with the Department in the amount of \$1,378,870.00 as required by Section 22a-6(a)(7) of the CGS in conjunction with the general requirements of Section 22a-209-4(i) of the RCSA.

- 14. The Permittee shall acknowledge and accept the following:
 - a. The purpose of the financial assurance is to cover the third party costs for handling, removing, transporting and disposing the maximum Permitted amount of unprocessed and processed solid waste at the Facility, and any additional cost(s) to ensure the proper closure of storage areas including, but not limited to, equipment rental, site clean-up, the decontamination and disposal of all equipment and processing and storage areas, and a fifteen percent (15%) contingency to cover unforeseen events or activities that may increase the overall cost to close the Facility.

 - b. The financial assurance instruments shall follow the requirements of Section 22a-209-4(i) of the RCSA, and 40 CFR 264.141 to 264.143 inclusive and 40 CFR 264.151, as referenced therein. The Permittee shall ensure that the financial assurance instrument is established in a format specified by the Commissioner for closure or post-closure maintenance and care, as appropriate.

 - c. The Department accepts five (5) types of financial assurance instruments, they are: (a) Trust Fund; (b) Irrevocable Standby Letter of Credit; (c) Financial Guarantee "Payment" Bond; (d) Performance Bond; and (e) Certificate of Insurance. The following documents are also required to be submitted:
 - i. A cover letter signed by the Permittee shall be submitted along with the Irrevocable Standby Letter of Credit, in accordance with Section 40 CFR 264.143(d)(4).
 - ii. A "Standby Trust Agreement" shall be submitted along with either a Irrevocable Standby Letter of Credit; Financial Guarantee "Payment" Bond; or Performance Bond; and
 - iii. A "Certification of Acknowledgement" shall be submitted along with the Trust Fund instrument.

- d. The financial assurance shall:
 - i. Be valid for and appropriately maintained during the term of this Permit;
 - ii. Specify the Permittee's name, the Facility's address, the number and issuance date of this Permit; and
 - iii. Be established in one or more of, the instrument formats found on the Department's website [www.ct.gov/DEEP/financialassurance].
 - e. The financial assurance instrument shall be adjusted annually for inflation within the sixty (60) days prior to the anniversary date of the financial assurance instrument, and whenever there is a change in operations that affects the cost of closing the Facility in accordance with the requirements of 40 CFR 264.142(b) as incorporated in the Section 22a-449(c)-104 of the RCSA.
15. The Permittee shall, no later than sixty (60) days from the issuance of the Commissioner's written authorization, pursuant to Condition No. B.5. of this Permit, perform quarterly compliance audits for the life of this Permit.
- a. The compliance audits required by this condition shall consist of a thorough and complete assessment of the Permittee's compliance with Sections 22a-209-1 through 22a-209-17 of the RCSA, Section 22a-207e(c) of the CGS and with the terms and conditions of this Permit.
 - b. Compliance Auditor
The compliance audits required by this condition shall be performed by an engineer licensed to practice in Connecticut ("P.E.") or consultant. Such P.E. or consultant shall be approved in writing by the Commissioner and will be required to prepare and submit to the Commissioner quarterly compliance audit reports.

The Permittee shall, prior to the Commissioner's approval of the P.E. or consultant: (a) submit for the Commissioner's evaluation a detailed description of the P.E. or consultant's credentials (education; experience; training) which are relevant to the work required under this condition; and (b) certify to the Commissioner that such P.E. or consultant:
 - i. Is not a subsidiary of or affiliated corporation to the Permittee or Permitted Facility;
 - ii. Does not own stock in the Permittee or any parent, subsidiary, or affiliated corporation;
 - iii. Has no other direct financial stake in the outcome of the compliance audit(s) outlined in this Permit;
 - iv. Has expertise and competence in environmental auditing and the regulatory programs being addressed through this Permit, including evaluation of compliance with requirements specified in Sections 22a-209-1 through 22a-209-17 of the RCSA, 22a-22e(c) of the CGS, and with the terms and conditions of this Permit; and
 - v. Within ten (10) days after retaining any P.E. or consultant other than the one originally identified pursuant to this condition, notify the Commissioner in writing of the identity of such other P.E. or consultant by submitting the information and documentation specified in this condition. Nothing in this condition shall preclude the Commissioner from finding a previously acceptable P.E. or consultant unacceptable.

c. Scope of Compliance Audits

Compliance audits shall:

- i. Detail the Permittee's compliance with the requirements of this Permit and all applicable provisions of Sections 22a-209-1 through 22a-209-17 of the RCSA; and
- ii. Describe the Compliance Auditor's participation in and the results of compliance audits conducted at the Facility on the loads of solid waste received at the Facility during the compliance audit. The purpose of such inspections is to determine whether such loads are being received that contain greater than ten percent (10%) by volume designated recyclable items; whether loads of source separated recyclable items contain greater than two percent (2%) by volume of non-recyclable wastes; and to detect patterns associated with such loads. Unless otherwise approved by the Commissioner, the compliance auditor shall inspect solid wastes unloaded from a minimum of ten (10) trucks received during the day of the compliance audit. The Compliance Auditor shall document the actual number of truck loads inspected and the findings of such inspections.

d. Compliance Audit Report

The results of each compliance audit shall be summarized in a Compliance Audit report. At a minimum such report shall include:

- i. The names of those individuals who conducted the compliance audit;
- ii. The areas of the Facility inspected;
- iii. The records reviewed to determine compliance;
- iv. A detailed description of the Permittee's compliance with this Permit and applicable regulations;
- v. The identification of all violations of this Permit and applicable regulations;
- vi. A description of the actions taken by the Permittee to correct patterns of loads received that exceed the threshold contaminant percentages specified in Condition No. C.6.i. for loads that are representative of the waste types authorized for receipt at the Facility;
- vii. The findings regarding the inspections conducted in accordance with this condition during the day of the compliance audit.
- viii. A description of the actions taken by the Permittee to correct the violation(s) identified in each compliance audit; and
- ix. The Permittee's certification of compliance with the regulations and documentation demonstrating such compliance pursuant to this Permit. In cases where multiple counts of the same violation are discovered, the report shall include a listing of each count.

e. Permittee's Responses to Compliance Audit

The Permittee and P.E. or consultant shall comply with the following:

- i. The inspection frequency shall be quarterly for the remaining life of the Permit;
- ii. All violations shall immediately be brought to the attention of the Permittee by the P.E. or consultant. The P.E. or consultant shall also

- notify the Department within five (5) days of the inspection of all violations noted during the inspection;
- iii. The Permittee shall correct all violations immediately. Should the Permittee be unable to immediately correct the violation, the Permittee within seven (7) days of the notification date, shall submit for the review and written approval of the Commissioner, a detailed plan to correct all violations noted. Such plan shall also include a schedule for implementation of the corrective actions required or recommended; and
 - iv. Within fifteen (15) days from the inspection date the P.E. or consultant shall submit, to the Department and the Permittee, the compliance audit report. A copy of the compliance audit report, shall be maintained at the Facility for the life of the Permit or for such other timeframe specified by the Commissioner.
- f. The Permittee shall cease accepting solid waste at the Facility in the event that the Permittee fails to submit in a timely manner the plan and schedule required by Condition No. 15. e. of this Permit or fails to correct the violations noted by the inspection(s) in accordance with the approved plan and schedule.
- g. **Documentation Submittal Deadlines**
The documents required to be submitted pursuant to this condition shall be submitted quarterly no later than January 31, April 30, July 31, October 31, directly to the Solid Waste Enforcement Program, Waste Engineering and Enforcement Division, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127.
16. Unless otherwise specified in writing by the Commissioner, any documents required to be submitted under this Permit shall be directed to:
- Solid Waste Program
Waste Engineering and Enforcement Division
Bureau of Materials Management and Compliance Assurance
Department of Energy and Environmental Protection
79 Elm Street, Hartford, CT 06106-5127
17. Any document, including, but not limited to any notice, which is required to be submitted to the Commissioner under this Permit shall be signed by a duly authorized representative of the Permittee, as defined in Section 22a-430-3(b)(2) of the RCSA, and by the individual or individuals responsible for actually preparing such documents, each of whom shall certify in writing as follows:
- “I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement in the submitted information may be punishable as a criminal offense.”

Any false statement in any document submitted pursuant to this Permit may be punishable as a criminal offense in accordance with Section 22a-6 of the CGS, pursuant to Section 53a-157 of the CGS, and in accordance with any other applicable statute.

18. The date of submission to the Commissioner of any document required by this Permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this Permit, including but not limited to, notice of approval or disapproval of any document or other action shall be the date such notice is personally delivered or the date three (3) days after it is mailed by the Commissioner, whichever is earlier. Any document or action which is due or required on a weekend or a legal state or federal holiday shall be submitted or performed by the next business day thereafter.
19. This Permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to, any and all public and private rights and to any federal, state or local laws or regulations pertinent to the Facility or activity affected thereby.
20. Nothing in this Permit shall affect the Commissioner's authority to institute any proceeding or to take any actions to prevent violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law.
21. Nothing in this Permit shall relieve the Permittee of other obligations under applicable federal, state and local laws.
22. This Permit shall expire five (5) years from the date of issuance and may be revoked, suspended, modified, renewed, or transferred in accordance with applicable laws.

Issued on this _____ day of _____ 2016.

By _____
Michael Sullivan
Deputy Commissioner

Application No. 201303057
Permit to Construct and Operate No. [insert Permit no.](#)
Permittee - Certified # [or](#) e-Certified
City/Town Clerk - Certified# [or](#) e-Certified