

REGULATORY COMPLIANCE DEPARTMENT



Permittee:
Greenland Biomass, LLC
219 N. Newnan Street
Jacksonville, FL 32202

FINAL Permit No.: 0310592-001-AC
Facility ID No.: 0310592
SIC No(s).: 16
Project: Air Curtain Incinerator

This permit is for the construction of an air curtain incinerator. Greenland Biomass, LLC shall be located at 11651 Davis Creek Road East, Jacksonville, Duval County, FL 32256; UTM Coordinates: Zone 17, 449.8 km East and 3336.1 km North; Latitude: 30° 09' 21" North and Longitude: 81° 31' 14" West.

This permit is issued under the provisions of Chapter 403, Florida Statutes (FS) and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, Florida Administrative Code (FAC). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the Regulatory Compliance Department, Environmental Quality Division (Permitting Authority) in accordance with the terms and conditions of this permit.

Operation Permit Application Due Date: December 1, 2014

Expiration Date: March 1, 2015

**Regulatory Compliance Department
Environmental Quality Division**

**Robert Steven Pace, P.E., Manager
Air Quality Branch**

RSP/DH

Section I. Facility Information

Subsection A. Facility/Project Description

This permit is for the construction of an air curtain incinerator for the destruction of land clearing debris. The air curtain incinerator is an Air Burners Model S-220 above ground, refractory lined, self-contained unit. The fan is powered by a four cylinder Turbo Diesel engine.

The facility is a natural non-Title V source of air pollution because the potential emissions of regulated air pollutants are less than 100 tons per year and the potential emissions of Hazardous Air Pollutants (HAP) are less than 10 tons per year for a single HAP and less than 25 tons per year for total HAPs pursuant to Chapter 62-210, FAC, and Rule 2.301, JEPB.

Subsection B. Summary of Emission Unit (EU) ID Nos. and Brief Descriptions

<u>EU No.</u>	<u>EU Description</u>
001	Air Curtain Incinerator

Subsection C. Relevant documents

Air Construction Permit Application received May 6, 2014

Section II. Facility Wide Conditions

Subsection A. General Conditions

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and are binding and enforceable pursuant to Section 403.141, FS. The permittee is placed on notice that the Permitting Authority will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Permitting Authority.
3. As provided in subsections 403.987(7), FS, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Permitting Authority rules, unless specifically authorized by an order from the Permitting Authority.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Permitting Authority rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Permitting Authority rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Permitting Authority personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Permitting Authority rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Permitting Authority with the following information:
 - a. A description of and cause of noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Permitting Authority for penalties or revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Permitting Authority may be used by the Permitting Authority as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Permitting Authority rules, except where such use is prescribed by Sections 403.111 and 403.73, FS. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Permitting Authority rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Permitting Authority rules.
11. This permit is transferable only upon Permitting Authority approval in accordance with Rule 62-4.120, FAC, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Permitting Authority.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - () Determination of Best Available Control Technology (BACT)
 - () Determination of Prevention of Significant Deterioration (PSD)
 - () Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500)
 - (X) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Permitting Authority rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Permitting Authority.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by this permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Permitting Authority rule.
 - c. Records of monitoring information shall include:
 1. The date, exact place, and time of sampling or measurements;
 2. The person responsible for performing the sampling or measurements;
 3. The date(s) analyses were performed;
 4. The person responsible for performing the analyses;
 5. The analytical techniques or methods used;
 6. The results of such analyses.
15. When requested by the Permitting Authority, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Permitting Authority, such facts or information shall be corrected promptly.

Subsection B. Specific Conditions

1. Any revision(s) to a permit (and application) shall be submitted to and approved by the Permitting Authority prior to implementing.
[Rule 62-4.080(2), FAC, and Rule 2.1401, JEPB]
2. The construction/modification shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, the Permitting Authority must be notified in writing sixty (60) days prior to the expiration of the construction permit. A new schedule and request for an extension of the construction permit must be submitted.
[Rule 62-4.080(3), FAC, and Rule 2.1401, JEPB]
3. To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an Air Operating Permit. The permittee shall submit the operating permit application and associated fee to the Department ninety (90) days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate.
[Rule 62-210.300(2), FAC, and Rule 2.301, JEPB]
4. Permittee shall notify the Permitting Authority fifteen (15) days prior to EU testing.
[Rule 62-297.310(7)(a)9., FAC, and Rule 2.1201, JEPB]

5. Testing of emissions shall be conducted with the EU operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, the EU may be tested at less than capacity; in this case subsequent EU operation is limited to 110 percent of the test load until a new test is conducted. Once the EU is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit.
[Rule 62-297.310(2), FAC, and Rule 2.1201, JEPB]
6. Copies of the test report(s) shall be filed with the Permitting Authority within forty-five (45) days of completion of testing.
[Rule 62-297.310(8)(b), FAC, and Rule 2.1201, JEPB]
7. Stack sampling ports and platforms shall not be required.
8. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter emissions from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions include the following:
 - a. Reduced speed for vehicular traffic.
 - b. Use of dust suppressants or wetting agents.
 - c. Use of paving or other asphaltic materials.
 - d. Removal of particulate matter from paved roads and/or other paved areas by vacuum cleaning or wetting prior to sweeping.
 - e. Covering of trucks, trailers, front end loaders and other vehicles or containers to prevent spillage of particulate matter during transport.
 - f. Use of mulch, hydro seeding, grassing and/or other vegetative ground cover on barren areas to prevent or reduce particulate matter from being windblown.
 - g. Use of hoods, fans, filters and similar equipment to contain, capture and vent particulate matter.
 - h. Enclosure or covering of conveyor systems.
 - i. Sprinkling or otherwise wetting of conveyor systems.[Rule 62-296.320(4)(c)., FAC, and Rule 2.1101, JEPB]
9. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), FAC, and Rule 2.1101, JEPB]
10. The facility shall be subject to City of Jacksonville Ordinance Code, Title X, Chapter 360 [Environmental Regulation], Chapter 362 [Air and Water Pollution], Chapter 376 [Odor Control], and JEPB Rule 1 [Final Rules with Respect to Organization, Procedure, and Practice].
11. The facility shall be subject to JEPB Rule 2, Part Nos. I through IV, and Part Nos. VII through XIV.
12. The permittee shall submit all compliance related notifications and reports required of this permit to:

Regulatory Compliance Department
Environmental Quality Division
Ed Ball Building, 214 North Hogan Street, Suite 500
Jacksonville, FL 32202
Telephone: (904) 255-7100
Fax: (904) 255-7130

Section III. Emission Units and Conditions

Emission Unit No. 001 – Air Curtain Incinerator

Emission Unit Description: **Air Curtain Incinerator**

This emission unit is subject to 40 CFR 60, Subpart CCCC-Standards of Performance for Commercial and Industrial Solid Waste Incineration Units

Essential Potential to Emit (PTE) Parameters

1. This EU shall be allowed to operate a maximum of 1,056 hours per year.
[Rule 62-210.200(225), F.A.C., and Rule 2.301, JEPB]

Emission Limitations and Standards

2. The maximum process rate shall be limited to 6 tons per hour and 6,336 tons per year of land clearing debris.
[Rule 62-210.200, F.A.C., and Rule 2.301, JEPB]
3. Visible Emissions (VE) shall be limited as follows:
 - (a). Outside of Startup: Maintain opacity to less than or equal to 10 percent opacity (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values), except as described in paragraph (b) of this section.
 - (b). During Startup: Maintain opacity to less than or equal to 35 percent opacity (as determined by the average of three 1-hour blocks consisting of ten 6-minute average opacity values) during the startup period that is within the first 30 minutes of operation.
[Rule 62-296.401(7)(b), FAC, 40 CFR 60.2250(a)&(b), and Rule 2.1101, JEPB]
4. The only materials that shall be burned in the air curtain incinerator are vegetative material and untreated wood, excluding sawdust. The air curtain incinerator shall not be used to burn any biological waste, hazardous waste, asbestos-containing materials, mercury-containing devices, pharmaceuticals, tires, rubber material, residual oil, used oil, asphalt, roofing material, tar, treated wood, plastics, garbage, trash or other material prohibited to be open burned as set forth in subsection 62-256.300(2), F.A.C. Only kerosene, diesel fuel, drip-torch fuel (as used to ignite prescribed fires), untreated wood, virgin oil, natural gas, or liquefied petroleum gas shall be used to start the fire in the air curtain incinerator. The use of used oil, chemicals, gasoline, or tires to start the fire is prohibited.
[Rule 62-296.401(7)(b)3., and Rule 2.1101, JEPB]
5. In no case shall the air curtain incinerator be started before sunrise. All charging shall end no later than one (1) hour after sunset. After charging ceases, air flow shall be maintained until all material within the air curtain incinerator has been reduced to coals, and flames are no longer visible.
[Rule 62-296.401(7)(b)5., and Rule 2.1101, JEPB]
6. The air curtain incinerator shall be attended at all times while materials are being burned or flames are visible within the incinerator.
[Rule 62-296.401(7)(b)6., and Rule 2.1101, JEPB]
7. The air curtain incinerator shall be located at least fifty (50) feet from any wildlands, brush, combustible structure, or paved public roadway.
[Rule 62-296.401(7)(b)7., and Rule 2.1101, JEPB]

8. The material shall not be loaded into the air curtain incinerator such that it protrudes above the air curtain.
[Rule 62-296.401(7)(b)8., and Rule 2.1101, JEPB]
9. Ash shall not be allowed to build up in the pit of the air curtain incinerator to higher than one third (1/3) the pit depth or to the point where the ash begins to impede combustion, whichever occurs first.
[Rule 62-296.401(7)(b)9., and Rule 2.1101, JEPB]
10. An operation and maintenance guide shall be available to the operators of the air curtain incinerator at all times, and the owner shall provide training to all operators before they work at the incinerator. This guide shall be made available to the Department or for an inspector's onsite review upon request.
[Rule 62-296.401(7)(b)10., and Rule 2.1101, JEPB]

Test Methods and Procedures

11. Testing for the demonstration of compliance shall be performed in accordance with EPA RM 9 (as described in 40 CFR 60 Appendix A), for the visual determination of opacity.
[Rule 62-296.401(7)(c)., and Rule 2.1101, JEPB] [62-297.310(4)(a)(2), FAC, and Rule 2.1201, JEPB]

Recordkeeping and Reporting Requirements

12. **Daily Log:** A daily operating log shall be maintained and at a minimum contain the following:
 - a. Date
 - b. Total charges
 - c. Total material (in ton) charged
 - d. Daily operating hours, which extends from the start of initial combustion to when all flames have been extinguished.
 - e. Daily average hourly charging rate.
 - f. Total monthly operating hours.
 - g. All maintenance that is performed.
 - h. Comments.
 - i. Operator's signature.[Rule 62-296.401(7)(b)5., and Rule 2.1101, JEPB]
13. Records of the results of all initial and annual visible emissions tests shall be kept by the owner or operator in either paper copy or electronic format for at least five (5) years. These records shall be made available to the Department or for an inspector's onsite review upon request.
[Rule 62-296.401(7)(c)3., and Rule 2.1101, JEPB]