Florida Department of Environmental Protection
Northwest District
160 W. Government Street, Suite 308
Pensacola, Florida 32502-5740

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard, Jr.
Secretary

Sent by Electronic Mail – Received Receipt Requested

PERMITTEE

Green Circle Bio Energy Inc.
2500 Green Circle Parkway
Cottondale, Florida 32431

Authorized Representative:
Mr. Greg Martin, Plant Manager

Air Permit No. 0630058-008-AC
Permit Expires: April 12, 2016

Cottondale Wood Pellet Plant
Title V Air Construction Permit
Wood Pellet Plant Updates

Cottondale Wood Pellet Plant produces wood pellets for use as fuel is a Wood Products Plant (Standard Industrial Classification No. 2499, Wood Products, Not Elsewhere Classified).

This is the final air construction permit, which authorizes the construction of a new Dry Wood Truck Dump to feed the existing Grinding Storage Bin, authorizes the installation of one new pelletizer each on Pelletizing Lines Nos. 1 and 3, and allows the use of natural gas, in addition to propane, as supplemental fuel in the Regenerative Thermal Oxidizer Combustion Chambers for Dryer Lines No. 1 and 2 and, removes hours of operation limit for the horizontal hammer mill and makes the hammer mill a part of EU 006. The Cottondale Wood Pellet Plant produces wood pellets for use as fuel (Standard Industrial Classification No. 2499, Wood Products, Not Elsewhere Classified). The facility is located in Jackson County at 2500 Green Circle Parkway, off U.S. Highway 231 south of Cottondale, Florida. The UTM Coordinates: Zone 16, 653.89 km East and 3401.68 km North; Latitude: 30° 44’ 17” North and Longitude: 85° 23’ 33” West. As noted in the Final Determination provided with this final permit, no changes were made to the draft permit.

This final permit is organized by the following sections.

Section 1. General Information
Section 2. Administrative Requirements
Section 3. Emissions Unit Specific Conditions
Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C., and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Pensacola, Florida

/s/ 4/12/11

Rick Bradburn, Air Program Administrator (Date)

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on April 12, 2011 to the persons listed below.

Greg Martin, Green Circle Bio Energy Inc.: gmartin@greencirclebio.com
Scott A. McCann, P.E.; Golder Associates, Inc.: scottmccann@golder.com
DEP Northwest District Branch Office, Panama City

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

/s/ 4/12/11

(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

This is a wood fuel pellet plant, comprised of a wood fiber receiving and storage area, two dryer lines, three pelletizing lines, and a pellet load-out area.

Logs are debarked and milled into chips. The chips are dried, ground and screened to a more consistent size. The ground wood is compressed to make wood pellets to be used as fuel. The finished pellets are loaded into railcars for shipment to customers.

Facility ID No. 0630058

ID No.	Emission Unit Description
001	Wood Fiber Receiving and Storage Area
002	Dryer Line 1
003	Dryer Line 2
004	Pelletizing Line 1
005	Pelletizing Line 2
006	Pelletizing Line 3
007	Bulk Load-out Area
009	Green Wood Chip Grinding System

Proposed Project

This project is for the following: 1) construction of a new Dry Wood Truck Dump, to feed the existing Grinding Storage Bin; 2) allow the Horizontal Hammermill to operate 8,760 hours per year; 3) install one new pelletizer mill each on Pelletizing Line Nos. 1 and 3; and 4) allow the use of natural gas, in addition to propane, as supplemental fuel to maintain temperature of the Regenerative Thermal Oxidizer Combustion Chambers for Dryer Line Nos. 1 and 2, and, 5) removes the hours of operation limit established for the horizontal hammer mill in permit 0630058-004-AC and makes the horizontal hammer mill a part of Pelletizing Line 3, EU 006.

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Northwest District Air Resource Management Program, Florida Department of Environmental Protection (Department). The District's mailing address is 160 Governmental Center, Suite 308, Pensacola, Florida 32502-5794. All documents related to applications for permits to operate an emissions unit shall be submitted to the District Office.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the District Office at the above address or nwdair@dep.state.fl.us.

3. Appendices: The following Appendices are attached as part of this permit:

    a. Appendix A. Citation Formats and Glossary of Common Terms;

    b. Appendix B. General Conditions;

    c. Appendix C. Common Conditions; and

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Source Obligation:

    (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

    (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

    [Rule 62-212.400(12), F.A.C.]

8. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application

form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

A. Wood Fiber Receiving and Storage Area

This section of the permit addresses the following emissions units.

ID No.	Emission Unit Description
001	Wood Fiber Receiving and Storage Area
009	Green Wood Chip Grinding System

Wood fiber (pulpwood logs or sawmill residuals) is unloaded and stored. Logs are debarked, run through the green wood chip grinding system (EU 009) and stored; bark is hammer-milled, screened and stored. All stored piles are conveyed for raw material and/or fuel. A green wood chip grinding system (EU 009) chips the logs to very uniform sizes under 3/8" dimensions.

This permit allows for the construction of a new Dry Wood Truck Dump in EU 001, enabling the facility to receive unadulterated dry wood chips and shavings by truck, which will be stored under cover until conveyed directly to the grinding storage bin (bypassing the Dryer Lines).

The following specific conditions apply to the emissions units listed above:

1. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for the change noted below, the unit remains subject to the conditions of all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

2. New Equipment: Except for the change noted below, the new equipment authorized by this permit shall be subject to the same requirements previously established for this emissions unit in all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

EQUIPMENT

3. Equipment Name: Permittee is authorized to install a new dry wood truck dump in the Wood Fiber Receiving and Storage Area, EU 001. [permit application No. 0630058-008-AC]

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B. Dryer Lines

This section of the permit addresses the following emissions units.

EU I.D.	Brief Description
002	Dryer Line 1
003	Dryer Line 2

Each Dryer Line consists of a bark fuel combustor which exhausts into a rotary drum dryer, which dries wood chips. The dryer exhaust flows through a fan induced drafted cyclone, a wet electrostatic precipitator and a regenerative thermal oxidizer, then out stacks D1-3 and D2-3, for Dryer Lines No. 1 and No. 2, respectively.

This construction permit allows the use of natural gas, in addition to propane, as supplemental fuel to maintain temperature of the Regenerative Thermal Oxidizer Combustion Chambers for Dryer Lines No. 1, EU 002, and No. 2, EU 003

The following specific conditions apply to the emissions units listed above:

1. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for the change noted below, the unit remains subject to the conditions of all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

2. New Equipment: Except for the change noted below, the new equipment authorized by this permit shall be subject to the same requirements previously established for this emissions unit in all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

EQUIPMENT

3. Equipment Name: Permittee is authorized to install piping and ancillary equipment necessary to use natural gas as a supplemental fuel to maintain temperature of the Regenerative Thermal Oxidizer Combustion Chambers for Dryer Lines No. 1 and No. 2. [Permit application 0630058-008-AC]

PERFORMANCE RESTRICTIONS

4. Regenerative Thermal Oxidizer (RTO) Combustion Chamber Temperature: The RTO for each Dryer Line shall be operated using propane or natural gas, with a combustion chamber temperature of no less than 1,440°F, averaged over three hours. [Rules 62-4.070(3) and 62-210.200(242){PTE}, F.A.C., permit 0630058-003-AC and permit application 0630058-008-AC]

C. Pelletizing Lines

This section of the permit addresses the following emissions units.

ID No.	Emission Unit Description
004	Pelletizing Line 1
005	Pelletizing Line 2
006	Pelletizing Line 3

Operation of Pelletizing Lines No. 1, No. 2, and No. 3, having multiple hammer mills and pelletizer mills. The hammer mills accurately grind the dry wood chips to under 4 mm (0.16”). The wood fiber is compressed by the Pelletizer rotating press rolls, exiting through the sizing die. The resultant heat of friction activates the wood lignin as the wood is compressed, effectively bonding the wood fiber into a durable pellet. Pellets exiting the Pelletizer mills are conveyed to a counter flow pellet coolers.

This construction permit allows for the construction of two pelletizer mills, one each for Pelletizer Line No.1 (EU 004) and Pelletizer Line No. 3 (EU 006). The two new pelletizer mills are manufactured by Bliss Industries, LLC, Model No. B200B-141. This will allow each Pelletizer Line to operate at a maximum process rate of 29.6 tons of pellets per hour. This will increase PM/PM_{10} emissions from 58.8 tons per year to 60.0 tons per year for each Pelletizer Line.

This construction permit removes the hours of operation limit established for the horizontal hammer mill in permit 0630058-004-AC and makes the horizontal hammer mill a part of Pelletizing Line 3, EU 006.

The following specific conditions apply to the emissions units listed above:

1. Previous Permits: This permit supplements all previously issued air construction and operation permits for this emissions unit. Except for the change noted below, the unit remains subject to the conditions of all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

2. New Equipment: Except for the change noted below, the new equipment authorized by this permit shall be subject to the same requirements previously established for this emissions unit in all other legally binding air construction and operating permits. [Rules 62-4.070(3) and 62-210.300(1), F.A.C.]

EQUIPMENT

3. Equipment Name: Permittee is authorized to install two Bliss Industries, LLC Model no. B200B-141 pelletizer mills, one each on Pelletizing Line No. 1 and Pelletizing Line No. 2. The existing experimental horizontal hammermill is to become a part of Pelletizing Line No. 3, EU 006. [permit application 0630058-008-AC]

PERFORMANCE RESTRICTIONS

4. Permitted Capacity: The maximum process rate for each Pelletizing Line, No.1, No. 2, and No.3 is 29.6 tons of pellets per hour, averaged over a 24-hour period. [Rules 62-4.070(3) and 62-210.200(242) {PTE}, F.A.C., and permit 0630058-003-AC and permit application 0630058-008-AC]

C. Pelletizing Lines

5. Restricted Operation: These emissions units are allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.070(3) and 62-210.200(242) {PTE}, F.A.C., and permit application 0630058-008-AC]

EMISSIONS STANDARDS

6. Particulate Matter: Particulate matter emissions from each Pelletizing Line shall not exceed 60 tons PM based on a 12-month rolling total. [Permit application 0630058-008-AC]