



State of Mississippi

AIR POLLUTION CONTROL PERMIT



Permit To Construct Air Emissions Equipment

THIS CERTIFIES

Green Circle Bio Energy Inc
7197 Highway 198 East
Lucedale, MS
George County

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

Mississippi Environmental Quality Permit Board

Mississippi Department of Environmental Quality

Issued/Modified:

Permit No. 0840-00022

Expires:

Agency Interest # 65276

*** Draft Permit ***

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Permit To Construct Air Emissions Equipment

Green Circle Bio Energy Inc

Subject Item Inventory

Permit Number:0840-00022

Activity ID No.: PER20140001

Subject Item Inventory:

ID	Designation	Description
AI65276		
EQPT1	AA-001	240 MMBTU/hr Wood Dust Burner and Wood Chip Dryer with natural gas for startup. Emissions are controlled by a wet ESP and a 10.8 MMBTU/hr Regenerative Thermal Oxidizer (RTO).
EQPT2	AA-002	Pellet Cooler with twin cyclones with a common stack
EQPT3	AA-003	Pellet Cooler with twin cyclones with a common stack
EQPT4	AA-004	Pellet Cooler with twin cyclones with a common stack
EQPT5	AA-005	Pellet Cooler with twin cyclones with a common stack
EQPT6	AA-006	110 hp 4-stroke Compression Ignition Diesel Fire Pump Engine
EQPT7	AA-007	459 hp 4-stroke Spark Ignition Natural Gas Emergency Generator
EQPT8	AA-008	459 hp 4-stroke Spark Ignition Natural Gas Emergency Generator

KEY

ACT = Activity

AREA = Area

CONT = Control Device

IA = Insignificant Activity

MAFO = Animal Feeding Operation

RPNT = Release Point

AI = Agency Interest

CAFO = Concentrated Animal Feeding Operation

EQPT = Equipment

IMPD = Impoundment

PCS = PCS

TRMT = Treatment

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KEY

WDPT = Withdrawal Point

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AI0000065276:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		<p>For Emission Points AA-002, AA-003, AA-004, and AA-005, the permittee shall not cause, permit, or allow the emission of PM (filterable only) in total quantities in any one hour from any manufacturing process, which includes any associated stacks, vents, outlets, or combination thereof, to exceed the amount determined by the relationship</p> $E = 4.1 p^{0.67}$ <p>where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour.</p> <p>Conveyor discharge of coarse solid matter may be allowed if no nuisance is created beyond the property boundary where the discharge occurs. [11 Miss. Admin. Code Pt. 2, R. 1.3.F(1)]</p>
L-2		<p>Facility-Wide Emission Limitations</p> <p>The permittee shall limit pellet production to no more than 743,000 tons/year (TPY) as determined for each consecutive 12-month period on a rolling monthly basis. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>
L-3		<p>Facility-Wide Emission Limitations</p> <p>The permittee shall limit green chipped softwood usage to no more than 660,592 tons/year (TPY) and hardwood/softwood shavings usage (not processed through the dryer) to no more than 145,000 (TPY) as determined for each consecutive 12-month period on a rolling monthly basis. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>
L-4		<p>Emission Points AA-006, AA-007, and AA-008 are subject to the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ. These engines are new institutional emergency stationary RICE located at an area source of HAP emissions that are required to meet the requirements of this standard by meeting the requirements of 40 CFR Part 60, Subpart IIII, for compression ignition engines or 40 CFR Part 60, Subpart JJJJ for spark ignition engines, as applicable. No further requirements of this standard apply to the emission units. [40 CFR 63_Subpart ZZZZ.63.6585 and 63.6590]</p>

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Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		For the entire facility, the permittee shall determine all necessary production amounts (i.e. pellets produced) and the amount of raw material usage on a monthly basis such that the permittee can determine pellets produced and raw material utilized in tons per month and tons per year for each consecutive 12-month period on a rolling monthly basis. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
M-2		For Emission Points AA-002, AA-003, AA-004, and AA-005, the permittee shall perform an initial stack test for VOC's within 180 days of certification of construction or within 60 days of reaching maximum production, whichever is earlier. The permittee shall utilize EPA Reference Method 25 or 25A to measure outlet VOC concentration and should report the results in lbs/hr, lbs/tons of pellets produced for the day, and tons/year. Also, the permittee should report the amount of raw material usage for the day in tons/day for green softwood chips, green hardwood chips, and hardwood/softwood shavings. For compliance purposes, the permittee may choose to perform the initial stack test on only one of the four emission points as a representation of the emissions from each of the four pellet cooler lines. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]
M-3		For Emission Points AA-002, AA-003, AA-004, and AA-005, the permittee shall perform an initial stack test for PM/PM10 within 180 days of certification of construction or within 60 days of reaching maximum production, whichever is earlier. The permittee shall utilize EPA Reference Methods 1-5, 40 CFR 60, Appendix A or EPA Approved Oregon Method 8 and EPA Reference Method 201 and 201A and should report the results in lbs/hr and tons/year. For compliance purposes, the permittee may choose to perform the initial stack test on only one of the four emission points as a representation of the emissions from each of the four pellet cooler lines. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]
M-4		For Emission Points AA-002, AA-003, AA-004, and AA-005, the permittee shall perform an initial stack test for HAP's within 180 days of certification of construction or within 60 days of reaching maximum production, whichever is earlier. The permittee shall utilize EPA Reference Method 25 or 25A to measure outlet HAP concentration and should report the results in lbs/hr and tons/year. For compliance purposes, the permittee may choose to perform the initial stack test on only one of the four emission points as a representation of the emissions from each of the four pellet cooler lines. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]

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Record-Keeping Requirements:

Condition No.	Condition
R-1	For the entire facility, the permittee shall maintain sufficient records to document all necessary production amounts (i.e. pellets produced) and the amount of raw material usage on a monthly basis such that the permittee can determine pellets produced and raw material utilized in tons per month and tons per year for each consecutive 12-month period on a rolling monthly basis. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

Submittal/Action Requirements:

Condition No.	Condition
S-1	General Condition: The permittee shall submit certification of construction: Due within thirty (30) days of completion of construction or installation of an approved stationary source or prior to startup, whichever is earlier. The notification shall certify that construction or installation was performed in accordance with the approved plans and specifications. In the event there is any change in construction from the previously approved plans and specifications or permit, the permittee shall promptly notify MDEQ in writing. If MDEQ determines the changes are substantial, MDEQ may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law. [11 Miss. Admin. Code Pt. 2, R. 2.5.D.]
S-2	Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. [11 Miss. Admin.Code Pt. 2, R.2.5.C(2).]
S-3	The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more. [11 Miss. Admin.Code Pt. 2, R.2.5.C(4).]
S-4	For Emission Points AA-002, AA-003, AA-004, and AA-005, the permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the DEQ. Also, the permittee shall notify the DEQ in writing at least ten (10) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]
S-5	For Emission Points AA-002, AA-003, AA-004, and AA-005, the permittee shall submit a test report of the results of the stack tests required by Conditions M-2, M-3, and M-4 within sixty (60) days of the individual test dates. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]

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Submittal/Action Requirements:

Condition No.	Condition
S-6	For the entire facility, the permittee shall submit a monitoring report due annually by the 31st of January for the preceding calendar year. This report shall provide all necessary production amounts (i.e. pellets produced) and the amount of raw material utilized (i.e.- green softwood chips, green hardwood chips, hardwood/softwood shavings not processed through the dryer) in tons per month and tons per year for each consecutive 12-month period on a rolling monthly basis. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]

Narrative Requirements:

General Condition:

Condition No.	Condition
T-1	General Condition: The stationary source shall be designed and constructed so as to operate without causing a violation of any Applicable Rules and Regulations or this permit, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries. [11 Miss. Admin. Code Pt. 2, R.2.5.A.]
T-2	General Condition: Any activities not identified in the application are not authorized by this permit. [Miss. Code Ann. 49_17_29 1.b]
T-3	General Condition: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits. [Miss. Code Ann. 49_17_29]
T-4	General Condition: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in Regulation 11 Miss. Admin. Code Pt.2, R. 1.10 "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. [11 Miss. Admin. Code Pt. 2, R. 1.10]

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Narrative Requirements:

General Condition:

Condition No.	Condition
T-5	General Condition: The permittee shall allow the Mississippi Environmental Quality Commission, the Mississippi Environmental Quality Permit Board, MDEQ staff and/or their authorized representatives, upon the presentation of credentials: a. To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring equipment or monitoring method required in this permit, and to sample any air emission. [Miss. Code Ann. 49_17_21]
T-6	General Condition: After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for good cause shown including, but not limited to, the following: a. Persistent violation of any terms or conditions of this permit; b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or c. A change in any condition that requires either a temporary or permanent reduction or elimination of previously authorized air emissions. [11 Miss. Admin.Code Pt. 2, R.2.2.C.]
T-7	General Condition: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality Office of Pollution Control. [Miss. Code Ann. 49_17_39]
Condition No.	Condition
T-8	General Condition: This permit is for air pollution control purposes only. [11 Miss. Admin.Code Pt. 2, R.2.1.D.]
T-9	General Condition: The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law. [11 Miss. Admin.Code Pt. 2, R.2.2.B(5).]
T-10	General Condition: It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits. [11 Miss. Admin.Code Pt. 2, R.2.1.D(6).]
T-11	General Condition: The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities. [11 Miss. Admin.Code Pt. 2, R.2.1.D(7).]

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Narrative Requirements:

Condition No.	Condition
T-12	General Condition: It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(a).]
T-13	General Condition: The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(b).]
T-14	General Condition: The permit does not convey any property rights of any sort, or any exclusive privilege. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(c).]
T-15	General Condition: The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(d).]
T-16	General Condition: This permit shall not be transferred except upon approval of the Permit Board. [11 Miss. Admin.Code Pt. 2, R.2.16.B.]
T-17	General Condition: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. [11 Miss. Admin.Code Pt. 2, R.1.1.D(7).]
T-18	General Condition: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more. [11 Miss. Admin.Code Pt. 2, R.2.5.C(1).]
T-19	General Condition: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee. [11 Miss. Admin.Code Pt. 2, R.2.5.D(3).]

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Narrative Requirements:

Condition No.	Condition
T-20	General Condition: Except as prohibited in 11 Miss. Admin. Code Pt. 2,R. 2.5.D(7) after certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by 11 Miss. Admin. Code Pt. 2, R. 2.13.G. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).]
T-21	General Condition: Except as otherwise specified in 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7), the application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).]
T-22	General Condition: Except as otherwise specified in 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7), upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).]
T-23	General Condition: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to net out of PSD/NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities. [11 Miss. Admin.Code Pt. 2, R.2.5.D(7).]
T-24	General Condition: Regarding compliance testing: (a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time. (b) Compliance testing will be performed at the expense of the permittee. (c) Each emission sampling and analysis report shall include but not be limited to the following: 1. detailed description of testing procedures; 2. sample calculation(s); 3. results; and 4. comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit. [11 Miss. Admin.Code Pt. 2, R.2.6.B(3),(4)&(6).]

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Narrative Requirements:

Condition No.	Condition
T-25	General Condition: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum. [11 Miss. Admin.Code Pt. 2, R.2.5.A(4).]

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EQPT0000000001 (AA-001) 240 MMBTU/hr Wood Dust Burner and Wood Chip Dryer with natural gas for startup. Emissions are controlled by a wet ESP and a 10.8 MMBTU/hr Regenerative Thermal Oxidizer (RTO). :

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		<p>The maximum permissible emission of ash and/or particulate matter (filterable only) from fossil fuel burning installations with equal to or greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship:</p> $E = 0.8808 * I^{-0.1667}$ <p>where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b)]</p>
L-2		<p>The maximum discharge of sulfur oxides from each fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. [11 Miss. Admin. Code Pt. 2, R. 1.4.A(1)]</p>
L-3		<p>The maximum opacity from any point source or emissions at any time shall not exceed 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A. [11 Miss. Admin. Code Pt. 2, R. 1.3.B]</p>

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		<p>For Emission Point AA-001, the permittee shall perform monthly inspections of the air pollution control equipment. Maintenance shall be performed as necessary to maintain proper operation of the pollution control equipment. In the event of a failure of the air pollution control equipment, the permittee shall cease operations until such time as repairs are made and the proper efficiency of the air pollution control equipment is restored. Records of monthly inspections and any maintenance work shall be kept in log form and must be made available for review upon request during any inspection visit by MDEQ personnel. The permittee shall maintain these records for at least five (5) years following the date of such record. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>

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EQPT0000000001 (continued):

Monitoring Requirements:

Condition No.	Parameter	Condition
M-2		For Emission Point AA-001, the permittee shall perform an initial stack test for VOC's within 180 days of certification of construction or within 60 days of reaching maximum production, whichever is earlier. The permittee shall utilize EPA Reference Method 25 or 25A to measure outlet VOC concentration and should report the results in lbs/hr and tons/year. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]
M-3		For Emission Point AA-001, the permittee shall perform an initial stack test for HAP's within 180 days of certification of construction or within 60 days of reaching maximum production, whichever is earlier. The permittee shall utilize EPA Reference Method 25 or 25A to measure outlet HAP concentration and should report the results in lbs/hr and tons/year. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]
M-4		For Emission Point AA-001, the permittee shall perform an initial stack test for NOx within 180 days of certification of construction or within 60 days of reaching maximum production, whichever is earlier. The permittee shall utilize EPA Reference Method 7 to measure outlet NOx concentration and should report the results in lbs/hr and tons/year. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]

Submittal/Action Requirements:

Condition No.	Condition
S-1	For Emission Point AA-001, the permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the DEQ. Also, the permittee shall notify the DEQ in writing at least ten (10) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]
S-2	For Emission Point AA-001, the permittee shall submit a test report of the results of the stack tests required by Conditions M-2, M-3, and M-4 within sixty (60) days of the individual test dates. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]

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EQPT0000000002 (AA-002) Pellet Cooler with twin cyclones with a common stack :

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The maximum opacity from any point source or emissions at any time shall not exceed 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A. [11 Miss. Admin. Code Pt. 2, R. 1.3.B]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		For Emission Point AA-002, the permittee shall perform monthly inspections of the air pollution control equipment. Maintenance shall be performed as necessary to maintain proper operation of the pollution control equipment. In the event of a failure of the air pollution control equipment, the permittee shall cease operations until such time as repairs are made and the proper efficiency of the air pollution control equipment is restored. Records of monthly inspections and any maintenance work shall be kept in log form and must be made available for review upon request during any inspection visit by MDEQ personnel. The permittee shall maintain these records for at least five (5) years following the date of such record. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
M-2		The permittee shall assure compliance with the opacity limitations by having an observer perform weekly opacity observations during daylight hours for a minimum of six (6) consecutive minutes and maintain a log of the results. If any visible emissions are detected, then a Visible Emission Evaluation (VEE) shall be performed using EPA Reference Method 9 by a certified observer during daylight hours. If conditions are such that opacity readings cannot be taken using evaluations of Method 9, the permittee shall note these conditions in the record and provide an explanation of why it was not possible to perform opacity readings/observations. The permittee shall maintain a log of the results and the log shall be made available upon request from MDEQ personnel. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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EQPT0000000003 (AA-003) Pellet Cooler with twin cyclones with a common stack :

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The maximum opacity from any point source or emissions at any time shall not exceed 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A. [11 Miss. Admin. Code Pt. 2, R. 1.3.B]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		For Emission Point AA-003, the permittee shall perform monthly inspections of the air pollution control equipment. Maintenance shall be performed as necessary to maintain proper operation of the pollution control equipment. In the event of a failure of the air pollution control equipment, the permittee shall cease operations until such time as repairs are made and the proper efficiency of the air pollution control equipment is restored. Records of monthly inspections and any maintenance work shall be kept in log form and must be made available for review upon request during any inspection visit by MDEQ personnel. The permittee shall maintain these records for at least five (5) years following the date of such record. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
M-2		<p>The permittee shall assure compliance with the opacity limitations by having an observer perform weekly opacity observations during daylight hours for a minimum of six (6) consecutive minutes and maintain a log of the results. If any visible emissions are detected, then a Visible Emission Evaluation (VEE) shall be performed using EPA Reference Method 9 by a certified observer during daylight hours.</p> <p>If conditions are such that opacity readings cannot be taken using evaluations of Method 9, the permittee shall note these conditions in the record and provide an explanation of why it was not possible to perform opacity readings/observations. The permittee shall maintain a log of the results and the log shall be made available upon request from MDEQ personnel. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>

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EQPT0000000004 (AA-004) Pellet Cooler with twin cyclones with a common stack :

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The maximum opacity from any point source or emissions at any time shall not exceed 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A. [11 Miss. Admin. Code Pt. 2, R. 1.3.B]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		For Emission Point AA-004, the permittee shall perform monthly inspections of the air pollution control equipment. Maintenance shall be performed as necessary to maintain proper operation of the pollution control equipment. In the event of a failure of the air pollution control equipment, the permittee shall cease operations until such time as repairs are made and the proper efficiency of the air pollution control equipment is restored. Records of monthly inspections and any maintenance work shall be kept in log form and must be made available for review upon request during any inspection visit by MDEQ personnel. The permittee shall maintain these records for at least five (5) years following the date of such record. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
M-2		The permittee shall assure compliance with the opacity limitations by having an observer perform weekly opacity observations during daylight hours for a minimum of six (6) consecutive minutes and maintain a log of the results. If any visible emissions are detected, then a Visible Emission Evaluation (VEE) shall be performed using EPA Reference Method 9 by a certified observer during daylight hours. If conditions are such that opacity readings cannot be taken using evaluations of Method 9, the permittee shall note these conditions in the record and provide an explanation of why it was not possible to perform opacity readings/observations. The permittee shall maintain a log of the results and the log shall be made available upon request from MDEQ personnel. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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EQPT0000000005 (AA-005) Pellet Cooler with twin cyclones with a common stack :

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The maximum opacity from any point source or emissions at any time shall not exceed 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A. [11 Miss. Admin. Code Pt. 2, R. 1.3.B]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		For Emission Point AA-005, the permittee shall perform monthly inspections of the air pollution control equipment. Maintenance shall be performed as necessary to maintain proper operation of the pollution control equipment. In the event of a failure of the air pollution control equipment, the permittee shall cease operations until such time as repairs are made and the proper efficiency of the air pollution control equipment is restored. Records of monthly inspections and any maintenance work shall be kept in log form and must be made available for review upon request during any inspection visit by MDEQ personnel. The permittee shall maintain these records for at least five (5) years following the date of such record. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
M-2		The permittee shall assure compliance with the opacity limitations by having an observer perform weekly opacity observations during daylight hours for a minimum of six (6) consecutive minutes and maintain a log of the results. If any visible emissions are detected, then a Visible Emission Evaluation (VEE) shall be performed using EPA Reference Method 9 by a certified observer during daylight hours. If conditions are such that opacity readings cannot be taken using evaluations of Method 9, the permittee shall note these conditions in the record and provide an explanation of why it was not possible to perform opacity readings/observations. The permittee shall maintain a log of the results and the log shall be made available upon request from MDEQ personnel. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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EQPT0000000006 (AA-006) 110 hp 4-stroke Compression Ignition Diesel Fire Pump Engine:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The maximum permissible emission of ash and/or particulate matter (filterable only) from each fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a)]
L-2		The maximum discharge of sulfur oxides from each fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. [11 Miss. Admin. Code Pt. 2, R. 1.4.A(1)]
L-3		The permittee is subject to and shall comply with the applicable Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII and General Provisions, 40 CFR 60, Subpart A. [40 CFR 60.4200(a)(3)]

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EQPT0000000007 (AA-007) 459 hp 4-stroke Spark Ignition Natural Gas Emergency Generator:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The maximum discharge of sulfur oxides from each fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. [11 Miss. Admin. Code Pt. 2, R. 1.4.A(1)]
L-2		The maximum permissible emission of ash and/or particulate matter (filterable only) from each fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a)]
L-3		The permittee is subject to and shall comply with the applicable Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ and General Provisions, 40 CFR 60, Subpart A. [40 CFR 60.4230]

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EQPT0000000008 (AA-008) 459 hp 4-stroke Spark Ignition Natural Gas Emergency Generator:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The maximum discharge of sulfur oxides from each fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. [11 Miss. Admin. Code Pt. 2, R. 1.4.A(1)]
L-2		The maximum permissible emission of ash and/or particulate matter (filterable only) from each fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a)]
L-3		The permittee is subject to and shall comply with the applicable Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ and General Provisions, 40 CFR 60, Subpart A. [40 CFR 60.4230]

GENERAL INFORMATION

Green Circle Bio Energy Inc
7197 Highway 198 East
Lucedale, MS
George County

Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
65276	Green Circle Energy, Inc	Official Site Name	1/29/2014	
2803900022	Green Circle Energy, Inc	Air-AIRS AFS	1/30/2014	

Basin: Pascagoula River Basin

Location Description:

*** Draft Permit ***