STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT PORTABLE AIR EMISSIONS EQUIPMENT ON A TEMPORARY BASIS AT LOCATIONS STATE-WIDE

THIS CERTIFIES THAT

Renewable Wood Solutions, LLC
P.O. Box 233
Crystal Springs, Copiah County, Mississippi

Installation and Operation of Portable Air Curtain Incinerators

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

	AUTHORIZED SIGNATURE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY				
Issued:	Permit No.: 0600-00076				

SECTION 1. GENERAL CONDITIONS

1.1 This permit is for air pollution control purposes only.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)

1.2 Any activities not identified in the application are not authorized by this permit.

(Ref.: Miss. Code Ann. 49-17-29(1)(b))

1.3 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)

1.4 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(6).)

1.5 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)

1.6 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(a).)

1.7 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(b).)

1.8 The permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)

1.9 The permittee shall furnish to the Department of Environmental Quality (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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(d).)

1.10 Design and Construction Requirements: The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations, 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 wellbeing or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(1)-(3).)

1.11 The necessary facilities shall be constructed to prevent any wastes or other products or substances to be placed in a location where they are likely to cause pollution of the air or waters of the State without the proper environmental permits.

(Ref.: Miss. Code Ann. 49-17-29(1) and (2))

1.12 Fugitive Dust Emissions from Construction Activities: 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(4).)

- 1.13 *General Nuisances:* The permittee shall not cause, permit, or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.
 - (a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.
 - (b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gasborne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.C.)

- 1.14 Right of Entry: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:
 - (a) To enter at reasonable times 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) 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 contaminants or waste waters, fuel, process material, or other material which affects or may affect emission of air contaminants from any source.

(Ref.: Miss. Code Ann. 49-17-21)

- 1.15 *Permit Modification or Revocation:* After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:
 - (a) Persistent violation of any of the 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 federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.C.)

1.16 Public Record and Confidential Information: 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.

(Ref.: Miss. Code Ann. 49-17-39)

1.17 *Permit Transfer:* This permit shall not be transferred except upon approval of the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B.)

1.18 Severability: 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(7).)

- 1.19 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.
 - (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
 - (i) An upset occurred and that the source can identify the cause(s) of the upset;
 - (ii) The source was at the time being properly operated;
 - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
 - (iv) That within five (5) working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;
 - (v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
 - (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
 - (3) This provision is in addition to any upset provision contained in any applicable requirement.
 - (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
 - (b) Startups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific

- emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.
- (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).
- (3) Where an upset, as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.,occurs during startup or shutdown, see the upset requirements above.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

1.20 *General Duty:* All air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 1.21 *Compliance Testing:* 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(3), (4), and (6).)

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SECTION 2. EMISSION POINT DESCRIPTION

The permittee is authorized to construct/install air emissions equipment, as described in the following table.

Emission Point	Description		
AA-001	One or more portable Air Curtain Incinerators (ACIs), each equipped with a firebox and portable, non-emergency, diesel-fired engine.		
AA-002	Ash Handling, including removal, storage, and transfer		

SECTION 3. EMISSION LIMITATIONS AND STANDARDS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limitation/Standard
State-Wide	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.1	Location	Locate at permitted solid waste disposal facilities state-wide
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(14)(a) and (e). and 11 Miss. Admin. Code Pt. 2, R. 1.3.G(2)(b).	3.2	Buffer Zone Criteria	See Permit Condition for specific requirements
AA-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.3	Annual Waste Combusted	≤ 175,000 tons per year (12-month rolling total from all ACIs)
		3.4	Hours of Operation	Limit burning between sunrise and 6:00 p.m.
		3.5	PM, NO _x , CO, and VOCs	$PM \leq 1.3 \text{ lb/ton}$ $NO_x \leq 1.0 \text{ lb/ton}$ $CO \leq 2.6 \text{ lb/ton}$ $VOC \leq 0.9 \text{ lb/ton}$
		3.6	Location	No more than 12 consecutive months at any one location
	40 CFR Part 60, Subpart CCCC – Standards of Performance for Commercial and Industrial Solid Waste Incineration (CISWI) Units 40 CFR 60.2010, 60.2015(a), and 60.2245; Subpart CCCC	3.7	Opacity	General applicability
	40 CFR 60.2245(b) and 60.2265, Subpart CCCC	3.8	Waste Restriction	Only burn wood waste, clean lumber and/or yard waste
	40 CFR 60.2250, Subpart CCCC	3.9	Opacity	≤ 10% (6-minute average), not to exceed 35% (6-minute average) during startup
	11 Miss. Admin. Code Pt. 2, R. 1.3.H(1).	3.10	PM (filterable)	≤ 0.2 grains per dry standard cubic foot (calculated to 12% CO ₂ by volume)

3.1 In compliance with the conditions of this permit, the permittee shall only install and operate the Air Curtain Incinerators (ACIs) (Emission Point AA-001) and the associated ash handling equipment (Emission Point AA-002) at permitted solid waste management facilities located in the State of Mississippi.

Each ACI shall only burn solid waste that meets the requirements of Condition 3.8 and is received and managed at a solid waste management facility permitted to operate under 11 Miss. Admin. Code Pt. 4, Ch. 1, with a Plan of Operations addressing disposal by incineration. This permit does not address or otherwise limit the use of ACIs owned and

operated by the permittee for temporary incineration of debris from a disaster or emergency, as allowed under applicable State and Federal regulations.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 3.2 For each ACI (Emission Point AA-001), the ACI must be at least 150 feet from any dwelling and from any light commercial building not owned by the applicant. All other sources of air emissions must be at least 150 feet from the nearest residential or recreational area. The terms *light commercial area*, recreational area, and residential area are defined as follows:
 - (a) Light commercial area. An area zoned for commercial use, or, in the absence of any local zoning ordinances, an area predominantly used for wholesale and retail trade in goods and services.
 - (b) Recreational area. Recreational area means:
 - (1) a national, state, county, or city park; or
 - (2) an outdoor recreational area, such as a golf course or swimming pool, owned by a city, county, state, or other public agency.
 - (c) Residential area. Residential area means:
 - (1) a group of 20 or more single-family dwelling units on contiguous property and having an average density of two or more units per acre, or
 - a group of 40 or more single-family dwelling units on contiguous property and having an average density of one or more units per acre, or
 - (3) a subdivision containing at least 20 constructed houses, in which the subdivision plat is recorded in the chancery clerk's office of the appropriate county.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(14)(a) and (e). and 11 Miss. Admin. Code Pt. 2, R. 1.3.G(2)(b).)

3.3 For all ACIs operated state-wide, the permittee shall limit the total annual throughput of waste combusted to no more than 175,000 tons per year, as determined by combining the throughput of all ACIs operated by the permittee for each 12-month rolling period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.4 For each ACI (Emission Point AA-001), the permittee shall only conduct burning between sunrise and 6:00 p.m. No combustible material shall be added to the ACI prior to or after this time period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 3.5 For each ACI (Emission Point AA-001), the ACI shall meet the following emission standards expressed as pounds of pollutant per ton of wood waste burned (i.e., lb/ton):
 - (a) $PM \le 1.3 \text{ lb/ton}$,
 - (b) $NO_x \le 1.0 \text{ lb/ton}$,
 - (c) $CO \le 2.6$ lb/ton, and
 - (d) VOCs \leq 0.9 lb/ton.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.6 To ensure each ACI is located on a temporary basis at any one site and the engine associated with the ACI meets the definition of a "nonroad engine" in 40 CFR 60.1068.30, the permittee shall not locate and operate the ACI and associated engine at the same location for more than 12 consecutive months.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.7 For each ACI (Emission Point AA-001), the permittee is subject to and shall comply with the applicable requirements for new ACI in 40 CFR Part 60, Subpart CCCC – Standards of Performance for Commercial and Industrial Solid Waste Incineration (CISWI) Units, and the applicable requirements of the General Provisions in 40 CFR Part 60, Subpart A. The permittee shall only operate ACIs for which construction commenced after June 4, 2010, or reconstruction or modification commenced after August 7, 2013.

(Ref.: 40 CFR 60.2010, 60.2015(a), and 60.2245, Subpart CCCC)

- 3.8 For each ACI (Emission Point AA-001), the permittee shall only burn wood waste, clean lumber waste, or yard waste, or a 100 percent mixture of wood waste, clean lumber, and yard waste. For the purposes of this permit, the noted wastes are defined as follows:
 - (a) "Wood waste" is defined as untreated wood and untreated wood products, including tree stumps, trees, tree limbs, bark, sawdust, chips, scraps, slabs, millings, and shavings.
 - (b) "Clean lumber" is defined as wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood products that have been painted, pigment-stained, or pressure-treated by compounds such as chromate copper arsenate, pentachlorophenol, and creosote.
 - (c) "Yard waste" is defined in 40 CFR 60.2977 as grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs. Yard waste comes from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands. Yard waste does not include construction, renovation, and demolition wastes or clean lumber.

(Ref.: 40 CFR 60.2245(b) and 60.2265, Subpart CCCC)

- 3.9 For each ACI (Emission Point AA-001), within 60 days of each ACI reaching the charge rate at which it will operate, but no later than 180 days after initial startup of each ACI, the permittee must meet the following two limitations:
 - (a) 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); and
 - (b) 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.

(Ref.: 40 CFR 60.2250, Subpart CCCC)

3.10 For each ACI (Emission Point AA-001), the maximum discharge of particulate matter shall not exceed 0.2 grains per standard dry cubic foot of flue gas calculated to twelve percent (12%) carbon dioxide by volume for products of combustion. This limitation shall apply when the incinerator is operating at design capacity.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.H(1).)

SECTION 4. WORK PRACTICES

Emission Point	Applicable Requirement	Condition Number(s)	Work Practice
AA-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	4.1	Operate and maintain ACI according to manufacturer's written instructions
		4.2	Operating criteria
		4.3	Approved and prohibited accelerants
AA-002	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	4.4	Standards for ash handling

4.1 For each ACI (Emission Point AA-001), the permittee shall operate and maintain the ACI according to the manufacturer's written instructions (i.e., the operating manual) to ensure complete combustion of the material charged into the firebox.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

4.2 For each ACI (Emission Point AA-001), the permittee shall not store combustible material within 100 feet of the ACI in any direction and shall operate the ACI in accordance with the setbacks recommended by the manufacturer for given wind speeds.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

4.3 For each ACI (Emission Point AA-001), the permittee shall use clean oils (e.g., diesel, No. 2 fuel oil, or kerosene) to start the fire. The permittee shall not use highly combustible accelerants, such as gasoline, to start the fire. Additionally, the permittee shall minimize (to the best extent practicable) the amount of accelerant necessary to ignite a start-up fire.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 4.4 For Ash Handling (Emission Point AA-002), the permittee shall comply with the following conditions for removal, transfer, and storage of the ash to prevent the ash from becoming airborne:
 - (a) Accumulated ash shall be removed from the firebox at the frequency specified in the manufacturer's written instructions;
 - (b) Ash shall be wetted during removal, as necessary, to prevent it from becoming air borne;
 - (c) Cooled ash shall be stored in roll-off containers, trailers, or other equivalent containers and shall be wetted or covered as needed to prevent ash from becoming airborne; and
 - (d) Containers shall be covered/tarped prior to and during transfer of the containers off-site.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

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SECTION 5. MONITORING AND RECORDKEEPING REQUIREMENTS

Refer to the Title V Operating Permit for monitoring and recordkeeping requirements.

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SECTION 6. REPORTING REQUIREMENTS

Refer to the Title V Operating Permit for reporting requirements.