

STATE OF MISSISSIPPI AND FEDERALLY ENFORCEABLE AIR POLLUTION CONTROL PERMIT

**TO OPERATE AIR EMISSIONS EQUIPMENT AT A
SYNTHETIC MINOR SOURCE**

THIS CERTIFIES THAT

Delta Energy Natchez LLC
61A Carthage Point Road
Natchez, Mississippi
Adams County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with the Federal Clean Air Act and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), the regulations and standards adopted and promulgated thereunder, and the State Implementation Plan for operating permits for synthetic minor sources.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

**AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Issued: _____

Permit No.: 0040-00059

Effective Date: As specified herein.

Expires: [No more than 5 years from the issue date.]

SECTION 1.

A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)
2. This permit is a Federally-approved permit to operate a synthetic minor source as described in 11 Miss. Admin. Code Pt. 2, R. 2.4.D.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.4.D.)
3. Any activities not identified in the application are not authorized by this permit.

(Ref.: Miss. Code Ann. 49-17-29 1.b)
4. 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 constructing or operating without a valid permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)
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).)
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 this 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).)
7. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)
8. The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board 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.

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

- 9. 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)

- 10. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this 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).)

- 11. This permit does not authorize a modification as defined in Regulation 11 Miss. Admin. Code Pt. 2, Ch.2., "Permit Regulations for the Construction and/or Operation of Air Emission Equipment." A modification may require a Permit to Construct and a modification of this permit. Modification is defined as "Any physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

- a. Routine maintenance, repair, and replacement;
- b. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- c. Use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- d. Use of an alternative fuel or raw material by a stationary source which:

- (1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, or 40 CFR 51.166; or
 - (2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, or 40 CFR 51.166;
- e. An increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I or 40 CFR 51.166; or
- f. Any change in ownership of the stationary source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.C(15).)

B. GENERAL OPERATIONAL CONDITIONS

1. Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in Regulation, 11 Miss. Admin. Code Pt. 2, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.10.)

2. Any diversion from or bypass of collection and control facilities is prohibited, except as provided for in 11 Miss. Admin. Code Pt. 2, R. 1.10., "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants."

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

3. Solids removed in the course of control of air emissions shall 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.

(Ref.: Miss. Code Ann. 49-17-29 1.a(i and ii))

4. Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.

- a. Upsets

- (1) For an upset defined in 11 Miss. Admin. Code Pt. 2, R. 1.2., 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 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 by 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 this regulation, 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 Rule 1.2 occurs during startup or shutdown, see the upset requirements above.

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

5. 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).)

C. PERMIT RENEWAL / MODIFICATION / TRANSFER / TERMINATION

- 1. For renewal of this permit, the applicant shall make application not less than one-hundred eighty (180) days prior to the expiration date of the permit substantiated with current emissions data, test results or reports or other data as deemed necessary by the Mississippi Environmental Quality Permit Board. If the applicant submits a timely and complete application pursuant to this paragraph and the Permit Board, through no fault of the applicant, fails to act on the application on or before the expiration date of the existing permit, the applicant shall continue to operate the stationary source under the terms and conditions of the expired permit, which shall remain in effect until final action on the application is taken by the Permit Board. Permit expiration terminates the

source's ability to operate unless a timely and complete renewal application has been submitted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.8.)

2. 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.

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

3. 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).)

4. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to:
 - 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 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.)

5. This permit may only be transferred upon approval of the Mississippi Environmental Quality Permit Board.

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

SECTION 2. EMISSION POINT DESCRIPTION

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

Emission Point	Description
AA-001	Nine Pulse Jet Baghouses for Particulate Carbon Solid Recovery from Tire Chip Processing
AA-002	Liquids Condensing System Non-Assisted Flare
AA-003	Four 16,800 gallon DESolv Hydrocarbon Liquid Fixed Roof Storage Tanks with Activated Carbon Canisters Facility References: Tank 900 T-01, Tank 900 T-02, Tank 900 T-03, and Tank 900 T-04
AA-004	Carbon Solids Pellet Dryers
AA-005	Truck and Railcar Loading
AA-006	Fugitive Emissions Sources
AA-007	1114 hp (750 kW) Natural Gas-fired SI 4ST RICE Emergency Generator Air-to-Fuel Ratio Controller Certified Engine

SECTION 3. EMISSION LIMITATIONS AND STANDARDS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Smoke	Opacity shall not exceed 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2		
	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.3	PM (Filterable Only)	$E = 4.1 p^{0.67}$
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.4	Throughput	Shall not exceed 192 tons per day.
		3.5	Produced Gas	Route all non-condensable gases from the liquid hydrocarbon condensers to the flare or recover these gases for sale. Upon installation of a loading rack, truck and railcar loading emissions shall be routed to the flare.
		3.6	PM	Route emissions to baghouse for control.
AA-002	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.7	Control Efficiency	Demonstrate a control efficiency of 98% by operating according to 40 CFR 60.18(b)
AA-002 AA-007	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.8	PM (Filterable Only)	0.6 lb/MMBtu
AA-004	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.9	PM (Filterable Only)	$E = 0.8808 * I^{0.1667}$
	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.10	SO ₂	Emissions shall not exceed 4.8 lb/MMBtu
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.11	Fuel Combustion	Shall combust either natural gas or non-condensable gas produced.
AA-007	40 CFR 60, Subpart JJJJ (Standards for Stationary Spark Ignition Internal Combustion Engines) 40 CFR 60.4230(a)(4)(iv), Subpart JJJJ	3.12	NO _x CO VOC	General Applicability
	40 CFR 60.4233(e), Table 1 to Subpart JJJJ, 60.4234, Subpart JJJJ	3.13	NO _x	2.0 g/HP-hr
			CO	4.0 g/HP-hr
			VOC	1.0 g/HP-hr
	40 CFR 60.4237(a), Subpart JJJJ	3.14	Hours of Operation	Install and Maintain a Non-Resettable Hour Meter
	40 CFR 60.4243(d)(1) through (3), Subpart JJJJ	3.15		Emergency Engine Requirement

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
	40 CFR 60.4246, Subpart JJJJ	3.16	NO _x CO VOC	General Provisions
AA-007	40 CFR 63, Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) 40 CFR 63.6580, 63.6585(c), 63.6590(c)(1), Subpart ZZZZ	3.17	HAP	General Applicability

3.1 For the entire facility, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) and (b).

- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen minutes per startup in any one hour and not to exceed three startups per stack in any twenty-four-hour period.
- (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four-hour period does not exceed ten minutes per billion BTU gross heating value of fuel in any one hour.

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

3.2 For the entire facility, except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Condition 3.1. This shall not apply to vision obscuration caused by uncombined water droplets.

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

3.3 For the entire facility, the permittee shall not allow the emission of particulate matter 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

$$E = 4.1 p^{0.67}$$

where E is the emission rate in pounds per hour (lb/hr) and p is the process weight input rate in tons per year (tpy).

Conveyor discharge of course solid matter may be allowed if no nuisance is created beyond the property boundary where the discharge occurs.

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

3.4 For the entire facility, the permittee shall limit the throughput of tire chips processed at the facility to 192 tons per day (tpd).

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

- 3.5 For the entire facility, the permittee shall either route all non-condensable gases from the liquid hydrocarbon condensers to the control flare or shall recover these gases for sale. Upon installation of a loading rack, truck and railcar loading emissions shall be routed to the flare. The permittee shall notify MDEQ upon completion of the loading rack.

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

- 3.6 For the entire facility, the permittee shall route emissions from each pellet dryer, each jet mill, and each carbon solids handling area to one or more baghouses for control of particulate emissions. Each baghouse shall be operated at all times when the carbon solids processing equipment is being operated.

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

- 3.7 For Emission Point AA-002, the permittee shall demonstrate a control efficiency of at least 98% by operating the control flare according to the requirements of 40 CFR 60.18(b), and the requirements specified in paragraphs (a) through (e) below:

- (a) The control flare shall be operated at all times when emissions may be vented to the flare.
- (b) The control flare shall be operated and maintained according to the manufacturer's recommendations.
- (c) The control flare shall be operated with no visible emissions as determined by an EPA Method 22 test, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.
- (d) The permittee shall maintain a flare pilot flame when emissions may be vented to the flare.
- (e) The control flare shall only be used with a combustion gas mixture whose net heating value is 200 BTU/scf or greater.

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

- 3.8 For Emission Points AA-002 and AA-007, the maximum permissible emission of ash and/or particulate matter from 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.

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

- 3.9 For Emission Point AA-004, the maximum permissible emission of ash and/or particulate matter for fossil fuel burning installations 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

$$E = 0.8808 * I^{-0.1667}$$

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.

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

- 3.10 For Emission Point AA-004, the maximum discharge of sulfur oxides from any 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).)

- 3.11 For Emission Point AA-004, the permittee shall burn either natural gas or non-condensable gas produced on site in the pellet dryers.

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

- 3.12 For Emission Point AA-007, the permittee is subject to and shall comply with all applicable requirements of the Standards for Stationary Spark Ignition Internal Combustion Engines (40 CFR Part 60, Subpart JJJJ) and General Provisions (40 CFR Part 60, Subpart A).

For the purposes of this subpart, Emission Point AA-007 is a 1114 hp, 4 stroke, emergency Spark Ignition ICE with air-to-fuel ratio (AFR) controller.

(Ref.: 40 CFR 60.4230(a)(4)(iv), Subpart JJJJ)

- 3.13 For Emission Point AA-007, the permittee shall comply with the following emission limitations over the entire life of the engine:

Pollutant	Emissions Limitation (g/HP-hr)
NO _x	2.0
CO	4.0
VOC	1.0

(Ref.: 40 CFR 60.4233(e), 60.4234, Table 1, Subpart JJJJ)

- 3.14 For Emission Point AA-007, the permittee shall install and maintain a non-resettable hour meter.

(Ref.: 40 CFR 60.4237(a), Subpart JJJJ)

- 3.15 For Emission point AA-007, the permittee shall operate the emergency stationary ICE according to the requirements in paragraphs (a) through (c). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart JJJJ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (a) through (c), is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs (a) through (c), the engine will not be considered an emergency engine under 40 CFR 60, Subpart JJJJ and shall meet all requirements for non-emergency engines.

- (a) There is no time limit on the use of emergency stationary ICE in emergency situations.
- (b) The engine may operate for maintenance checks and readiness testing for a maximum of 100 hours per calendar year provided the tests are recommended.
 - (1) The permittee may petition the DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (c) The engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours provided for in paragraph (b). Except as provided in 40 CFR 60.4243(d)(3)(i), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 60.4243(d)(1) through (3), Subpart JJJJ)

- 3.16 For Emission Point AA-007, the permittee shall comply with all applicable General Provisions in Table 3 to 40 CFR 60, Subpart JJJJ.

(Ref.: 40 CFR 60.4246, Subpart JJJJ)

- 3.17 For Emission Point AA-007, the permittee is subject to and shall comply with all applicable requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ) and General Provisions (40 CFR 63, Subpart A). The permittee shall meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart JJJJ.

(Ref.: 40 CFR 63.6580, 63.6585(c), 63.6590(c)(1), Subpart ZZZZ)

SECTION 4. WORK PRACTICES

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Work Practice
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	4.1	PM VOC HAP	Operate all equipment as efficiently as possible and perform routine maintenance
		4.2		Operate and Maintain Control and Product Recovery Technology according to Manufacturer's Recommendations
AA-007	40 CFR 60.4243(g), Subpart JJJJ	4.3	NO _x CO VOC	Follow Manufacturer's Instructions

- 4.1 For the entire facility, in order to minimize the emissions of air pollutants, the permittee shall operate all air emissions equipment as efficiently as possible. Furthermore, the permittee shall perform routine maintenance on all air emissions equipment such that the equipment may be operated in an efficient manner.

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

- 4.2 For the entire facility, the permittee shall operate and maintain all control and product recovery technology in accordance with the manufacturer's recommended operating procedures. The manufacturer's operating procedures shall be available for review by DEQ personnel.

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

- 4.3 For Emission Point AA-007, the permittee shall operate and maintain the air-to-fuel ratio controller with the three-way catalysts/non-selective catalytic reduction. The AFR controller shall be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.

(Ref.: 40 CFR 60.4243(g), Subpart JJJJ)

SECTION 5. MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.1	Recordkeeping	Maintain records for a minimum of 5 years.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.2	Throughput	Record Tire Chips Processed
				Record Gas Produced
				Record Produced Gas Flared
		5.3	Gas Analysis	Recordkeeping Requirement
AA-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.4	Pressure Drop	Monitoring and Recordkeeping Requirement
AA-002	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.5	Flare Pilot Flame	Monitoring and Recordkeeping Requirement
		5.6		
		5.7	Gas Flow	Monitoring and Recordkeeping Requirement
			Maintenance	Monitoring and Recordkeeping Requirement
AA-003	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.8	Breakthrough	Monitor and Record Carbon Canister Replacement
AA-004	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.9	Gas Combustion	Monitoring and Recordkeeping Requirement
AA-007	40 CFR 60.4243(b)(1) and 60.4243(a)(1), Subpart JJJJ	5.10	NO _x CO VOC	Follow Manufacturer's Instructions
	40 CFR 60.4245(a)(1), (2), and (3), Subpart JJJJ	5.11	Hours of Operation	Recordkeeping Requirement
	40 CFR 60.4245(b), Subpart JJJJ	5.12		Recordkeeping Requirement

- 5.1 The permittee shall retain all required records, monitoring data, supporting information and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings or other data for continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to the DEQ as required by Applicable Rules and Regulations or this permit upon request.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9.)

- 5.2 For the entire facility, the permittee shall monitor and record the following:

- (a) The tire chips processed in tons for each calendar day.
- (b) The cubic feet of oil produced on a monthly basis.
- (c) The cubic feet of non-condensable gas produced on a monthly basis.
- (d) The cubic feet of non-condensable gas flared on a monthly basis.

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

- 5.3 For the entire facility, the permittee shall conduct an analysis of the non-condensable gas routed to the flare.

If a change is made at the facility, which causes the most recent gas analysis to no longer be representative, e.g., gas/tire processing equipment is changed, then the facility shall perform a gas analysis within ninety (90) calendar days of the change.

Gas analyses shall be performed annually, not to exceed 14 months from the previous analysis. Each gas analysis shall include the following properties: gross and net heating value, molecular weight, specific gravity, and speciated VOC components (minimally to C6+).

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

- 5.4 For Emission Point AA-001, the permittee shall continuously monitor the pressure drop across each baghouse. The permittee shall keep in log form a record of any pressure drop deviation that falls outside the manufacturer's recommendation. The log shall include the date, time, and duration that any baghouse operates outside of the pressure drop range. The permittee shall record duration of operation which allows carbon solids processing to occur while the associated baghouse is inoperable. The log shall include the date and extent of all maintenance activities on each baghouse (including bag replacement, monitoring system calibration, etc.).

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

- 5.5 For Emission Point AA-002, the permittee shall comply with the following monitoring requirements:

- (a) The permittee shall continuously monitor and record the presence of the flare pilot flame by use of a thermocouple or any other equivalent device to detect the presence of a flame; or
- (b) The permittee shall continuously maintain and operate an auto-igniter system on the flare to ensure a flame is immediately restored when emissions are being sent to the flare. At a minimum, the permittee shall comply with the following:
 - (1) The auto-igniter system shall be an electric arc ignition system. The electric arc ignition system shall pulse continually and a device shall be installed and used to continuously monitor that the electric arc ignition system is operational.
 - (2) The auto-igniter system shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
 - (3) The auto-igniter system must be equipped with a malfunction alarm and remote notification system that alerts facility personnel if the auto ignition system fails to light the flame.
 - (4) If the auto-igniter system fails to light the flame, it must be relit as soon as safely possible and the auto-igniter system must be repaired or replaced as soon as practicable.
 - (5) Physical inspections of all equipment associated with the auto-igniter system shall be performed quarterly. The permittee shall respond to any observation

of any auto-igniter failure and ensure the equipment is returned to proper operation as soon as practicable and safely possible after an observation or an alarm sounds.

- (c) The permittee shall perform monthly visible emissions tests for a minimum of fifteen (15) minutes using EPA Method 22 visual emissions while the facility is operating with all gases being flared. If visible emissions are observed for a period greater than one (1) minute, corrective action shall be taken immediately. Immediately following completion of the corrective action(s), the permittee shall demonstrate compliance by performing an EPA Method 22 test for a period of two (2) hours and shall monitor and maintain records of the flare rate during the test. The monthly visible emissions tests shall be separated by at least fifteen (15) days between each test.
- (d) If a change is made at the facility, which causes the previous 2-hour visible emissions test to no longer be representative, e.g., the flare is replaced or modified, then the permittee must perform a Method 22 test within ninety (90) days of the change.
- (e) If the visible emissions limit in Condition 3.6 is not met during the Method 22 test, corrective action shall be taken immediately. Immediately following completion of the corrective action(s), the permittee shall demonstrate compliance by performing an EPA Method 22 test for a period of two (2) hours.

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

- 5.6 For Emission Point AA-002, the permittee shall record the time, date, and duration during which emissions are vented to the flare while the flare is inoperable.

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

5.7 For Emission Point AA-002, the permittee shall comply with the following recordkeeping requirements:

- (a) The permittee shall continuously monitor and record the gas flow to the flare. The permittee shall maintain a device for monitoring gas flow to the flare. The gas flow monitoring device shall be maintained in accordance to the manufacturer's recommendations.
- (b) The permittee shall maintain a copy of the flare manufacturer operating and maintenance recommendations and detailed records of all maintenance performed on the flare.
- (c) The permittee shall maintain continuous records of the thermocouple or equivalent device output demonstrating the presence of a flame in the control flare whenever the facility is in operation.
- (d) The permittee shall maintain records of all EPA Method 22 tests, and details of any corrective/preventative action(s) taken.
- (e) For the auto-igniter system, the permittee shall maintain records of any instances in which the auto-igniter system did not function, the date and times of the occurrence, the corrective actions taken, preventative measures adopted to prevent reoccurrence, all instances of alarm activation, including the date and cause of alarm activation, actions taken to bring the flare into normal operating conditions, and any maintenance activities conducted on the auto-igniter system.

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

5.8 For Emission Point AA-003, the permittee shall monitor each carbon canister for breakthrough in accordance with the manufacturer's recommendations. The permittee shall replace the carbon canister upon breakthrough. The permittee shall record the date that the carbon canister is replaced for each tank.

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

5.9 For Emission Point AA-004, the permittee shall monitor and record the amount of non-condensable gas combusted for each calendar month. A material balance may be used to determine the monthly gas usage.

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

- 5.10 For Emission Point AA-007, the permittee shall operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee shall keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance.

If the permittee does not operate and maintain the certified stationary SI ICE and control device according to the manufacturer's emission-related written instructions, the engine shall be considered a non-certified engine, and the permittee shall create and keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test in accordance with 40 CFR 60, Subpart JJJJ within 1 year of the engine being considered a non-certified engine. Subsequent performance tests shall be conducted every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(Ref.: 40 CFR 60.4243(b)(1) and 60.4243(a)(1), Subpart JJJJ)

- 5.11 For Emission Point AA-007, the permittee shall keep the following records:
- (a) All notifications submitted to comply with 40 CFR 60, Subpart JJJJ and all documentation supporting any notification.
 - (b) Maintenance conducted on the engine.
 - (c) Documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
 - (d) If the engine is operating as a non-certified stationary SI internal combustion engine, documentation that the engine meets the emission standards required by Condition 3.13.

(Ref.: 40 CFR 60.4245(a)(1), (2), and (3), Subpart JJJJ)

- 5.12 For Emission Point AA-007, the permittee keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(Ref.: 40 CFR 60.4245(b), Subpart JJJJ)

SECTION 6. REPORTING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.1	Report permit deviations within five (5) working days.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.2	Submit certified annual monitoring report.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.3	All documents submitted to MDEQ shall be certified by a Responsible Official.

6.1 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) working days of the time the deviation began.

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

6.2 Except as otherwise specified herein, the permittee shall submit a certified annual synthetic minor monitoring report postmarked no later than 31st of January for the preceding calendar year. This report shall address any required monitoring specified in the permit. All instances of deviations from permit requirements must be clearly identified in the report. Where no monitoring data is required to be reported and/or there are no deviations to report, the report shall contain the appropriate negative declaration.

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

6.3 Any document required by this permit to be submitted to the MDEQ shall contain a certification signed by a responsible official stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

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