

**STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT**

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Caterpillar, Inc.
501 Cardinal Drive
Alcorn, 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 Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and 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.

Permit Issued: December 17, 2008

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: November 30, 2013

Permit No.: 0060-00003

Modification Date: October 6, 2010

Modification Date: December 29, 2012

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FOR HAZARDOUS AIR POLLUTANTS FOR STATIONAIRY
RECIPROCATING INTERNATIONAL COMBUSTION ENGINES
(RICE)**

SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (Ref.: APC-S-6, Section III.A.6.a.)

1.2 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. (Ref.: APC-S-6, Section III.A.6.b.)

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. 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.: APC-S-6, Section III.A.6.c.)

1.4 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-6, Section III.A.6.d.)

1.5 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 permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: APC-S-6, Section III.A.6.e.)

1.6 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.: APC-S-6, Section III.A.5.)

1.7 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation APC-S-6.

(a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring

data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: APC-S-6, Section VI.A.2.)

- (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee. (Ref.: APC-S-6, Section VI.A.2.) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time. (Ref.: APC-S-6, Section VI.D.2.)
 - (c) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due. (Ref.: APC-S-6, Section VI.D.)
 - (d) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition. (Ref.: APC-S-6, Section VI.C.)
- 1.8 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (Ref.: APC-S-6, Section III.A.8.)
- 1.9 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (Ref.: APC-S-6, Section II.E.)
- 1.10 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:

- (a) enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. (Ref.: APC-S-6, Section III.C.2.)
- 1.11 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: APC-S-1, Section 3.9(a))
- 1.12 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: APC-S-1, Section 3.9(b))
- 1.13 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: APC-S-6, Section III.F.1.)
- 1.14 Nothing in this permit shall alter or affect the following:
- (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act. (Ref.: APC-S-6, Section III.F.2.)
- 1.15 The permittee shall comply with the requirement to register a Risk Management Plan if

permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: APC-S-6, Section III.H.)

- 1.16 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application. (Ref.: APC-S-6, Section IV.C.2., Section IV.B., and Section II.A.1.c.)
- 1.17 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
- (a) the changes are not modifications under any provision of Title I of the Act;
 - (b) the changes do not exceed the emissions allowable under this permit;
 - (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
 - (1) a brief description of the change(s),
 - (2) the date on which the change will occur,
 - (3) any change in emissions, and
 - (4) any permit term or condition that is no longer applicable as a result of the change;
 - (d) the permit shield shall not apply to any Section 502(b)(10) change. (Ref.: APC-S-6, Section IV.F.)
- 1.18 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 APC-S-3, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: APC-S-3)
- 1.19 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations APC-S-2, "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require

modification of this permit in accordance with Regulations APC-S-6, "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". 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 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 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 Subpart I or 40 CFR 51.166; or
- (f) any change in ownership of the stationary source."

1.20 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: APC-S-6, Section IV.D.4.)

1.21 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission. (Ref.: APC-S-6, Section III.B.1)

1.22 Except as otherwise specified or limited herein, the open burning of residential, commercial,

institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator. (Ref.: APC-S-1, Section 3.7)

1.23 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies.

- (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.
- (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:

- (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
- (2) the permitted facility was at the time being properly operated;

- (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein. (Ref.: APC-S-6, Section III.G.)

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

- (a) Upsets (as defined by APC-S-1, Section 2.37)
- (1) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (i) an upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) the source was at the time being properly operated;
 - (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and
 - (v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
 - (2) In any enforcement proceeding, the permittee 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.

(b) Startups and Shutdowns (as defined by APC-S-1, Sections 2.34 & 2.29)

(1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:

(i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;

(ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or

(iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.

(2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.

(3) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply.

(c) Maintenance.

(1) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following:

(i) the permittee can identify the need for the maintenance;

(ii) the source was at the time being properly operated;

(iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;

- (iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and
- (v) the notice shall contain a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.

(2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.

- (3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. (Ref.: APC-S-1, Section 10)

1.25 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation APC-S-1, Section 8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-000	Facility Wide Remanufacturer of Engines and Components
AB-000	(AB-001 – AB-003) Backup Generators
AB-001 (Ref. 68M-039)	Diesel Engine Backup Emergency Generator (425 HP unit located at Sawyer Road)
AB-002 (Ref. 68M-905)	Diesel Engine Backup Emergency Generator (300 HP unit located on Westside of the Manufacturing Building)
AB-003 (Ref. 68M-0539)	Diesel Engine Backup Emergency Generator (660 HP unit located adjacent to the Breakroom)
AC-000	(AC-001 – AC-064) Metal Preparation and Coating Operations
AC-001 (Ref. AA-023 & Ref. 68M-096)	Diesel Engine Spray Paint Booth
AC-004 (Ref. 68M-050)	Diesel Engine Crankshafts Flusher and Coater
AC-007 (Ref. 68M-110)	Steel Dunker Tank
AC-008 (Ref. 68M-202)	Diesel Engine Burner Tubes Dunker Tank
AC-009 (Ref. 68M-214)	Diesel Engine Cylinder Intake Valve Dunker Tank
AC-010 (Ref. 68M-1380)	Diesel Engine Blocks Washer and Coater.
AC-012 (Ref. 68M-373-6 & 373-7)	Miscellaneous Diesel Engine Parts Flusher and Coater (Stages #6 and #7 of Salt Bath).
AC-013 (Ref. 68M-1446)	Diesel Engine Cylinder Head Flame Spray Dunker Tank
AC-015 (Ref. 68M-622)	Diesel Engine Crankshafts Blue Tarp Dunker Tank
AC-016 (Ref. AA-027 & Ref. 68M-625)	Diesel Engine Cylinder Heads Packing
AC-017 (Ref. 68M-849)	Diesel Engine Short Block Flusher and Coater.
AC-018 (Ref. 68M-854)	Diesel Engine Blocks Flusher and Coater.
AC-019 (Ref. 68M-921-4)	Diesel Engine Cylinder Head 5 Stage Washer
AC-020 (Ref. 68M-921-5)	Diesel Engine Cylinder Heads 5 stage Washer
AC-021 (Ref. 68M-960)	Miscellaneous Diesel Engine Assembly Dunker Tank
AC-022 (Ref. 68M-0990)	Finished Diesel Engine Blocks Washer and Coater.
AC-025	Diesel Engine Blocks Final Wash

Emission Point	Description
(Ref. 68M-1270)	
AC-028 (Ref. 68M-1296)	Diesel Engine Cylinder Heads Packing
AC-029 (Ref. AA-024 & Ref. 68M-106)	Steel Dunker Tank 6
AC-030 (Ref. AA-025 & Ref. 68M-107)	Steel Dunker Tank 7
AC-032 (Ref. 68M-072)	Miscellaneous Engine Parts Assembly Dunker Tank
AC-033 (Ref. 68M-1118)	Diesel Engine Crankshafts Prep Washer
AC-035 (Ref. 68M-1695)	Tool Flush and Clean Operation
AC-036 (Ref. 68M-0369)	Tool Flush and Clean Operation
AC-037 (Ref. 68M-0563)	Tool Flush and Clean Operation
AC-038 (Ref. 68M-0633)	Tool Flush and Clean Operation
AC-039 (Ref. 68M-0952)	Tool Flush and Clean Operation
AC-040 (Ref. 68M-0953)	Tool Flush and Clean Operation
AC-041 (Ref. 68M-0954)	Tool Flush and Clean Operation
AC-042 (Ref. 68M-0955)	Tool Flush and Clean Operation
AC-043 (Ref. 68M-002)	Diesel Engine Crankshaft Journal Flusher and Cleaner
AC-044 (Ref. 68M-1361-6 & 7)	Diesel Engine Cylinder Head Washer (Stage 6 and 7)
AC-045 (Ref. 68M-1367-2)	3500 Block Wash, Stage 2
AC-046 (Ref. 68M-1368-2)	3500 Block Wash, Stage 2
AC-047 (Ref. 68M-1532)	Intake Valve Grinder
AC-048 (Ref. 68M-1690)	Typhoon Washer
AC-049 (Ref. 68M-1399)	Salvage and Developmental Dunker Tank
AC-050 (Ref. 68M-1400)	Salvage and Developmental Dunker Tank
AC-051 (Ref. 68M-1401)	Salvage and Developmental Dunker Tank

Emission Point	Description
AC-052 (Ref. 68M-1402)	Salvage and Developmental Dunker Tank
AC-053 (Ref. 68M-1403)	Salvage and Developmental Dunker Tank
AC-054 (Ref. 68M-0951)	Test Cell High Pressure Washer
AC-055 (Ref. 68M-1435)	Flywheel Dunker Tank
AC-056 (Ref. 68M-1460-2)	Diesel Engine Cylinder Head Washer
AC-057 (Ref. 68M-1474)	Fuel Rail Flusher
AC-058 (Ref. 68M-1713)	Salvage and Developmental Dunker Tank
AC-059 (Ref. 68M-1727)	Wire Arc Spray Cell Dunker Tank
AC-060 (Ref. 68M-0874)	Block Mag Flux Operation
AC-061 (Ref. 68M-1476)	Oil/ Water Separator
AC-062 (Ref. 68M-1216)	Head Mag Flux Operation
AC-063 (Ref. 68M-1676)	Vibratory Miscellaneous Steel Shaker Operation
AC-064 (Ref. 68M-1803, 68M-1804, 68M-1805)	3500 Disassembly Detail Booths
AD-000	(AD-001 – AD-004) Engine Test Cell Operations
AD-001 (Ref. AA-017 & Ref. 68M-399)	Engine Test Cell #2 used for the performance testing of rebuilt diesel engines
AD-002 (Ref. AA-018 & Ref. 68M-400)	Engine Test Cell #3 used for the performance testing of rebuilt diesel engines
AD-003 (Ref. AA-019 & Ref. 68M-401)	Engine Test Cell #4 used for the performance testing of rebuilt diesel engines
AD-004 (Ref. AA-020 & Ref. 68M-0507)	Engine Test Cell #1 used for the performance testing of rebuilt diesel engines
AE-000	(AE-001 – AE-015) Fuel Burning Equipment
AE-001 (Ref. AA-015) (Ref. 68M-921-1) (Ref. 68M-921-2) (Ref. 68M-921-3) (Ref. 68M-921-4) (Ref. 68M-921-5)	5-stage Head Washer: Equipped with a mist collector Stage #1 equipped with a 8.0 MMBTU/Hr natural gas fired Burner, Stage #2 equipped with a 3.8 MMBTU/Hr natural gas fired Burner, Stage #3 equipped with a 3.8 MMBTU/Hr natural gas fired burner, Stage #4 equipped with a 1.8 MMBTU/Hr natural gas fired burner and Stage #5 equipped with a 1.8 MMBTU/Hr natural gas fired burner.

Emission Point	Description
AE-002 (Ref. 68M-068)	Crankshaft Oven equipped with a 2.0 MMBTU/Hr natural gas fired burner.
AE-003 (Ref. 68M-311)	Head Weld Pretreat Oven equipped with a 2.4 MMBTU/Hr natural gas fired burner.
AE-004 (Ref. 68M-312)	Head Weld Pretreat Oven equipped with a 2.4 MMBTU/Hr natural gas fired burner.
AE-005 (Ref. 68M-373-1)	Salt Bath Pot #1 equipped with a venture scrubber and equipped with a 2.0 MMBTU/Hr natural gas fired burner.
AE-006 (Ref. 68M-373-2)	Salt Bath Pot #2 equipped with a venture scrubber and equipped with a 2.0 MMBTU/Hr natural gas fired burner.
AE-008 (Ref. 68M-0951)	High Pressure Washer equipped with a 0.75 MMBTU/Hr natural gas fired burner.
AE-009 (Ref. 68M-990)	Engine Block Washer equipped with a 0.40 MMBTU/Hr natural gas fired burner.
AE-010 (Ref. 68M-993)	Cylindrical Head Washer equipped with a 1.75 MMBTU/Hr natural gas fired burner.
AE-011 (Ref. 68M-1030)	High Pressure Engine Parts Washer equipped with a 0.35 MMBTU/Hr natural gas fired burner.
AE-012 (Ref. 68M-1208)	Engine Test Cell Hot Water Heater equipped with a 1.10 MMBTU/Hr natural gas fired burner.
AE-013 (Ref. 68M-1700)	Fluidized Sand Bed Operation equipped with a 0.357 MMBTU/Hr natural gas fired burner.
AE-014 (Ref. 68M-1279, 1280, 1323 - 1327)	Seven (7) Puddle Welders each equipped with a 0.13 MMBTU/Hr acetylene gas fired burner.
AE-015 (Ref. 68M-1360)	High Pressure Washer equipped with a 0.4 MMBTU/Hr natural gas fired burner.
AF-000	(AF-001 – AF-007) Metal Surface Preparation Operations
AF-001 (Ref. 68M-0283 vents to 68M-0049)	Crankshaft Shotpeen Operations equipped with a 99.0% efficient Pangborn Dust Collector.
AF-002 (Ref. 68M-0406 vents to 68M-1640)	Cylindrical Head Blasting Operation equipped with a 99.0% efficient Wheelabrator Dust Collector.
AF-003 (Ref. 68M-1226, 68M-1432, 68M-1742, and 68M-1743 vent to 68M-1071)	Spray Process, Metal Abrasive Spray Process, Thermal Spray, and Welding Operation Booths in the Salvage Development Area equipped with a 99.9% efficient Metco Dust Collector.
AF-004 (Ref. 68M-1254 vents to 68M-1194)	Spray Weld Operations Booth equipped with a 99.9% efficient Donaldson Torit Downflo Dust Collector.
AF-005 (Ref. 68M-1521 68M-1705, & 68M-1706 vent to 68M-1486)	Wire Spray Processes and Laser Blasting equipped with a 99.0% efficient Dustex Industrial Dust Collector.

Emission Point	Description
AF-006 (Ref. 68M-1723 vented to 68M-1729, 68M-1724 vented to 68M-1728, & 68M-1731 vented to 68M-0144)	Wire Arc Spray Booths equipped with a Dust Collector
AF-007 (Ref. 68M-1792 vents to 68M-1790)	Bore Spray Operation
AG-000	(AG-001 – AG-023) Storage Tanks
AG-001	One (1) 26,000 Gallon Hazardous Waste Storage Tank
AG-002	One (1) 6200 Gallon Diesel Fuel Storage Tank.
AG-003	One (1) 500 Gallon Gasoline Fuel Storage Tank.
AG-004	One (1) 500 Gallon Diesel Fuel Storage Tank
AG-005	One (1) 6200 Gallon Lube Oil Storage Tank.
AG-006	One (1) 7000 Gallon Used Oil Storage Tank.
AG-007	One (1) 7000 Gallon Reserve Hazardous Waste Storage Tank.
AG-008	One (1) 5000 Gallon Detrex 75 DQ Alkaline Storage Tank.
AG-009	One (1) 5000 Gallon Prevox 505 Rust Preventative Storage Tank.
AG-010	One (1) 5000 Gallon Alkaline Storage Tank.
AG-011	One (1) 900 Gallon Liquid Oxygen Storage Tank.
AG-012	One (1) 250 Gallon Liquid Argon Storage Tank.
AG-013	Two (2) 10,000 Gallon Wastewater Equalization Tank.
AG-014	One (1) 5,000 Gallon Rust Preventative Storage Tank.
AG-015	One (1) 1,000 Gallon Maintenance Reserve Storage Tank.
AG-016	One (1) 2,500 Gallon Maintenance Reserve Storage Tank.
AG-017 (Ref. 68M-0993)	One (1) 2,700 Gallon Cylinder Head Final Wash Storage Tank.
AG-018 (Ref. 68M-1152)	One (1) 300 Gallon Cylinder Head Washer Storage Tank.
AG-019 (Ref. 68M-1294)	One (1) 125 Gallon Cylinder Head Wash Storage Tank.
AG-020 (Ref. 68M-0939)	One (1) 500 Gallon Cylinder Head Dunker Storage Tank.
AG-021 (Ref. 68M-1259)	One (1) 150 Gallon Cylinder Head Ultrasonic Storage Tank.
AG-022 (Ref. 68M-1460)	One (1) 240 Gallon Stage 1 Cylinder Head Washer Storage Tank.
AG-023 (Ref. 68M-3400)	One (1) 75 Gallon Cylinder Heads Assembly Air Test Storage Tank.
AH-000	Plant 2 Manufacturing Operations

SECTION 3. EMISSION POINT LIMITATIONS AND STANDARDS

A. Facility-Wide Emission Limitations and Standards

3.A.1 Except as otherwise specified or limited herein, 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) & (b).

- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) 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 (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

(Ref.: APC-S-1, Section 3.1)

3.A.2 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 Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets.

(Ref.: APC-S-1, Section 3.2)

B. Emission Point Specific Emission Limitations and Standards

Emission Points	Applicable Requirement	Condition Numbers	Pollutant/Parameter	Limit/Standard
Entire Facility (including insignificant activities and emission points)	APC-S-1, Section 3.4(a)(2)	3.B.1	PM/PM10	$E(\text{lb/MMBTU/HR}) = 0.8808 * (I)^{0.1667}$
	APC-S-1, Section 4.1(a)	3.B.2	SO ₂	4.8 lbs/MMBTU/HR or as otherwise limited by facility modification restrictions.
	APC-S-1, Section 3.4(a)(1)	3.B.3	PM/PM10	0.6 lbs/MMBTU/HR or as otherwise limited by facility modification restrictions.
	APC-S-1, Section 3.6(a)	3.B.4	PM/PM10	$E = 4.1p^{0.67}$
	Federally Enforceable Permit Established Herein.	3.B.5	HAP	9.9 tons/year for each consecutive 12 months for individual HAP and 24.9 tons/year for each consecutive 12 months for combined HAP's.
AB-000	40 CFR Part 63, Subpart ZZZZ, MACT Stationary Reciprocating Internal Combustion Engines (RICE) (40 CFR 63.6585)	3.B.6	HAP	MACT applicability only, No requirements for existing affected sources at this time.

3.B.1 The maximum permissible emission of ash and/or particulate matter from 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.: APC-S-1, Section 3.4(a)(2))

3.B.2 The maximum discharge of sulfur oxides from any fuel burning installations 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.: APC-S-1, Section 4.1(a))

3.B.3 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.: APC-S-1, Section 3.4(a)(1))

- 3.B.4 Except as otherwise specified, the permittee shall not cause, permit, or allow the emission from any manufacturing process, in any one hour from any point source, particulate matter in total quantities in excess of the amount determined by the relationship

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

where E is the Emission rate in pounds per hour and p is the process weight input rate in tons per hour.

(Ref.: APC-S-1, Section 3.6(a))

- 3.B.5 The permittee shall limit the facility's Hazardous Air Pollutant (HAP) to no more than 9.9 TPY (tons per year) of any single HAP and no more than 24.9 TPY of total combined HAP's as determined for each consecutive 12-month period on a rolling monthly basis.

(Ref. Federally Enforceable Permit Established Herein.)

- 3.B.6 Emission points AB-001, AB-002, and AB-003 are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ. These units satisfy the definition of stationary RICE that is an existing emergency use unit and are not required to meet the requirements of this standard or the General Provisions, 40 CFR Part 63, Subpart A.

(Ref.: 40 CFR 63.6585, 40 CFR 63.6590(b)(3), and 40 CFR 63.6675)

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:
- (a) the identification of each term or condition of the permit that is the basis of the certification;
 - (b) the compliance status;
 - (c) whether compliance was continuous or intermittent;
 - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
 - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.
- (Ref.: APC-S-6, Section III.C.5.a.,c.,&d.)

SECTION 5. MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
- (a) the date, place as defined in the permit, and time of sampling or measurements;
 - (b) the date(s) analyses were performed;
 - (c) the company or entity that performed the analyses;
 - (d) the analytical techniques or methods used;
 - (e) the results of such analyses; and
 - (f) the operating conditions existing at the time of sampling or measurement.
(Ref.: APC-S-6, Section III.A.3.b.(1)(a)-(f))
- 5.A.3 Except as otherwise specified herein, the permittee shall retain records of all required monitoring data and support information 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 for continuous monitoring instrumentation, and copies of all reports required by the permit. (Ref.: APC-S-6, Section III.A.3.b.(2))
- 5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with APC-S-6, Section II.E. (Ref.: APC-S-6, Section III.A.3.c.(1))
- 5.A.5 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 within five (5) days of the time the deviation began. (Ref.: APC-S-6, Section III.A.3.c.(2))
- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.
- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

B. Specific Monitoring Requirements

Emission Points	Pollutant/ Parameter Monitored	Specific Monitoring and Recording Requirement	Condition Number	Applicable Requirement
Entire Facility	HAP	Quality and Quantity of all HAP containing material used.	5.B.1	Federally Enforceable Permit Limit Established Herein.
AF-000	PM/PM10	Weekly Opacity Inspections and VEE's	5.B.2	APC-S-6, Section III.A.3

- 5.B.1 For the entire facility, the permittee shall determine for each coating, adhesive, solvent, or other HAP containing material used:
- (a) Quantity used (gal or lb)
 - (b) The percentage of each HAP by weight
 - (c) The density (lbs/gal), unless material usages are measured in lbs
 - (d) The quantity used, in weight percentage, of each itemized HAP
 - (e) The permittee may utilize data supplied by the manufacturer, or analysis of HAP content by EPA Test Method 24, 40 CFR 60, Appendix A.
(Ref. Federally Enforceable Permit to Construct issued on July 1, 2002.)
- 5.B.2 For Emission Points AF-000, the permittee shall perform weekly Visual Emission Evaluations (VEEs/Observations) by EPA Method 22, 40 CFR 60, Appendix A. Observations shall be conducted during daylight hours and while the equipment is in operation. If visible emissions are observed, excluding condensed water vapor, the permittee shall:
- (a) Within 24 hours, take corrective action that eliminates the visible emissions or verify that the unit causing the emissions and any associated air pollution control equipment are operating normally in accordance with design and standard procedures, and under the same conditions in which compliance was achieved in the past, and
 - (b) If visible emissions are not eliminated, have a certified visual emissions observer determine compliance with the opacity standard using EPA Reference Method 9 within three business days, and

- (c) Report the visible emissions as a potential deviation (or as a violation if demonstrated by EPA Reference Method 9) according to the reporting requirements of this permit.(Ref.: APC-S-6, Section III.A.3)

C. Specific Recording Requirements

Emission Points	Pollutant/Parameter	Specific Recording Requirements	Condition Number	Applicable Requirement
Entire Facility	HAP	Quality and Quantity of HAP's used.	5.C.1	APC-S-6, Section III.A.3
Entire Facility	Fuel Usage	Quality and Quantity of all Fuel consumed	5.C.2	APC-S-6, Section III.A.3
AF-000	PM/PM10	Weekly Opacity Inspections and VEE's	5.C.3	APC-S-6, Section III.A.3

5.C.1 For the entire facility, the permittee shall maintain sufficient records to document:

- (a) Identification of and the total gallons used of each coating, adhesive, solvent, or other HAP containing material used on a monthly basis and in each consecutive 12-month period on a rolling basis.
- (b) The HAP content(s) of each coating, adhesive, solvent or other HAP containing material used. A description of the method used to determine HAP content shall accompany this data.
- (c) The density of each coating, adhesive, solvent or other HAP containing material used.
- (d) The emission rate of each individual HAP and the total HAP emission rate in tons/year for each consecutive 12-month period on a rolling monthly basis.

(Ref.: APC-S-6, Section III.A.3)

5.C.2 For the entire facility, the permittee shall maintain records on site of the quality and and quantity of fuel consumed. (Ref.: APC-S-6, Section III.A.3)

5.C.3 For Emission Points AF-000, the permittee shall maintain sufficient records to document weekly Visual Emission Evaluations by EPA Method 22 (VEEs/Observations) or EPA Method 9 evaluations. These records shall be kept in log form and shall be made available upon request by the Mississippi Department of Environmental Quality (MDEQ) personnel. (Ref.: APC-S-6, Section III.A.3)

5.C.4 The permittee shall maintain copies of all records and reports on site for at least five (5) years and shall make them available upon request by Mississippi Department of Environmental Quality (MDEQ) personnel.(Ref. Federally Enforceable Permit Established Herein.)

D. Specific Reporting Requirements

Emission Points	Pollutant/ Parameter	Specific Reporting Requirements	Condition Number	Applicable Requirement
Entire Facility	HAP	Quality and Quantity of HAP's used, submitted semiannually.	5.D.1	Federally Enforceable Permit Limit Established Herein.

5.D.1 For the entire facility, the permittee shall submit semi-annuals reports providing:

- (a) Identification of each coating, adhesive, solvent, or other HAP containing material used.
- (b) The HAP content(s) of each coating, adhesive, solvent or other HAP containing material used. A description of the method used to determine HAP content shall accompany this data.
- (c) The density of each coating, adhesive, solvent or other HAP containing material.
- (d) The total gallons of each coating, solvent or other HAP containing material used in each consecutive 12-month period on a rolling basis.
- (e) The emission rate of each individual HAP and the total HAP emission rate in tons/month and tons/year for each consecutive 12-month period on a rolling basis. (Ref. Federally Enforceable Permit Established Herein.)

SECTION 6.

ALTERNATIVE OPERATING SCENARIOS

None permitted.

SECTION 7.

TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act. The full text of the referenced regulations is contained in Appendix B to this permit.

- 7.1 If the permittee stores or transports class I or class II substances, the permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
- (a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if being introduced into interstate commerce pursuant to ' 82.106.
 - (b) The placement of the required warning statement must comply with the requirements pursuant to ' 82.108.
 - (c) The form of the label bearing the required warning statement must comply with the requirements pursuant to ' 82.110.
 - (d) No person may modify, remove, or interfere with the required warning statement except as described in ' 82.112.
- 7.2 If the permittee performs any of the activities described below, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to ' 82.156.
 - (b) Equipment used during the maintenance, service, repair, or disposal of appliance must comply with the standards for recycling and recovery equipment pursuant to ' 82.158.
 - (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to ' 82.161.

- (d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with the recordkeeping requirements pursuant to ' 82.166. (AMVAC - like appliance@ is defined at ' 82.152.)
 - (e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to ' 82.156.
 - (f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to ' 82.166.
- 7.3 If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 7.4 If the permittee performs a service on motor (fleet) vehicles and if this service involves an ozone-depleting substance (refrigerant) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
- The term Amotor vehicle@ as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term AMVAC@ as used in Subpart B does not include air-tight sealed refrigeration systems used for refrigerated cargo, or air conditioning systems on passenger buses using HCFC-22 refrigerant.
- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program.

APPENDIX A

List of Abbreviations Used In this Permit

APC-S-1	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
APC-S-2	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
APC-S-3	Regulations for the Prevention of Air Pollution Emergency Episodes
APC-S-4	Ambient Air Quality Standards
APC-S-5	Regulations for the Prevention of Significant Deterioration of Air Quality
APC-S-6	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
APC-S-7	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lbs/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards For Hazardous Air Pollutants, 40 CFR 61 or National Emission Standards For Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOG	Non-Methane Volatile Organic Compounds
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 Φ m in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

APPENDIX B

40 CFR 82

PROTECTION OF STRATOSPHERIC OZONE

APPENDIX C

40 CFR 63 Subpart *ZZZZ*

National Emission Standards for Hazardous Air Pollutants for
Stationary Reciprocating Internal Combustion Engines (RICE)