STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Mars Foods US, LLC 1098 North Broadway Street Greenville, Mississippi Washington 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: AUG 0 9 2013

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: JUL 3 1 2018 Permit No.: 2800-00113

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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 judgements where such judgements 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 emissionsrelated 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))
- 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.)
- 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 "[a]ny 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 2.34)
 - (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 2.31 & 2.26)
 - (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;

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- (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
AB-002, AB-003, AB-004, AB-005, AB-006, AB-007	Six (6) Miura EX-300SG natural gas fired only steam boilers – each rated at 11.964 MMBTUH
AC-001	Central Stack; (Cargo Brown Baghouse, Packaging Baghouse, and Bran Baghouse)
AC-007	Rough Rice process controlled by a baghouse. AF-001 (Limestone Bin Vent) may also vent to this baghouse during limestone loading activities
AC-011	Convenience Plant L-1, including five natural gas fired dryers each at 4 MMBTUH
AC-012	Convenience Plant L-2, including ten natural gas fired dryers (6 dryers at 4 MMBTUH and 4 dryers at 6.5 MMBTUH)
AC-013	Tote (Finished Rice) Loadout Baghouse
AC-014	Bran Bins controlled by a Baghouse
AC-015	PFB Column 4.9 MBTUH natural gas-fired Dryer/PFB Bran milling process controlled by a Baghouse
AC-017	Applied for, but unit never constructed.
AC-018	2.2 TPH Natural Select (Infused Rice) process and 20 MMBTUH natural gas-fired Band Dryer controlled by a Cyclone and a Baghouse.
AC-024	White Rice Bran Collection System
AC-025	White Rice Dust Collection System
AC-026	Finished Rice Bin and Pre-packaging Equipment Dust Collection System
AC-027	Filter Receivers capturing White Rice Bran and Dust Product
AC-028	Filter Receivers capturing White Rice Bran and Dust Product
AD-001	R & D Pilot Plant Controlled by a Cyclone
AE-001	185hp Diesel-fired Compression Ignition Internal Combustion Fire Pump Engine with a displacement of < 30 liters/cylinder
AF-001	Limestone Silo controlled by a Baghouse; also vents to AC-007, during limestone loading activities

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Emission Point	Description
AG-001	Hopper Truck Unloading
AG-002	Truck Loading via Grain Loading Arms
AH-001	Building Fogging for Pesticide Control
AH-002	Railcar Fumigant for Pesticide Control
AH-003	Trailer Fumigant for Pesticide Control

SECTION 3. EMISSION LIMITATIONS & STANDARDS

- A. Facility-Wide Emission Limitations & 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. <u>Emission Point Specific Emission Limitations & Standards</u>

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
	APC-S-1, Section 3.4(a)(2)	3.B.1	PM/PM ₁₀	E=0.8808*I ^{-0.1667} , when combusting fossil fuels
AB-002,	APC-S-1, Section 4.1(a)	3.B.2	SO_2	4.8 lbs/MMBTU or as otherwise limited by facility modification restrictions
AB-003, AB-004, AB-005,	Fuel Restriction; Federally Enforceable Permit Established Herein	3.B.6	SO ₂ & PM/PM ₁₀	The six (6) boilers are limited to use of pipeline quality natural gas only.
AB-006, AB-007	NSPS, Subpart Dc, 40 CFR 60.40c, Standards of Performance for Small Industrial - Commercial- Institutional Steam Generating Units.	3.B.10	PM, SO2	As long as the permittee utilizes only natural gas as fuel, then only 40 CFR 60.48c(a), (g)(2) and/or (g)(3), and (j) apply to these affected units.
AC-001	Construction Permit issued on June 30, 1999.	3.B.4	PM/PM ₁₀	6.35 lbs/hr, 27.81 TPY
110 001	APC-S-1, Section 3.6(a)	3.B.3	PM/PM_{10}	$E = 4.1p^{0.67}$
	Construction Permit issued on June 30, 1999; (lbs/hr) modified by Title V Operating Permit issued August 9, 2013.	3.B.4	PM/PM ₁₀	0.80 lbs/hr, 0.99 TPY
AC-007	APC-S-1, Section 3.6(a)	3.B.3	PM/PM ₁₀	$E = 4.1p^{0.67}$
	Operational Restriction; modified by Title V Operating Permit issued August 9, 2013.	3.B.11	PM/PM ₁₀	2,485 hr/yr
	Construction Permit issued on June 30, 1999.	3.B.4	PM/PM ₁₀	10.73 lbs/hr, 47.0 TPY
AC-011	APC-S-1, Section 4.1(a)	3.B.2	SO_2	4.8 lbs/MMBTU or as otherwise limited by facility modification restrictions
	APC-S-1, Section 3.6(a)	3.B.3	PM/PM_{10}	$E = 4.1p^{0.67}$
AC-012	Construction Permit issued on June 30, 1999; modified with the Federally Enforceable Permit Established Herein	3.B.7	PM/PM ₁₀	7.00 lbs/hr, 30.66 TPY
	APC-S-1, Section 4.1(a)	3.B.2	SO_2	4.8 lbs/MMBTU or as otherwise limited by facility modification restrictions
	APC-S-1, Section 3.6(a)	3.B.3	PM/PM ₁₀	$E = 4.1p^{0.67}$

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Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AC-013	Construction Permit issued on October 8, 1997.	3.B.5	PM/PM ₁₀	0.22 lbs/hr, 0.92 TPY
AC-013	APC-S-1, Section 3.6(a)	3.B.3	PM/PM ₁₀	$E = 4.1p^{0.67}$
AC-014	Construction Permit issued on October 8, 1997.	3.B.5	PM/PM ₁₀	1.21 lbs/hr, 5.04 TPY
	APC-S-1, Section 3.6(a)	3.B.3	PM/PM_{10}	$E = 4.1p^{0.67}$
AC-015	Construction Permit issued on October 8, 1997; modified with the Federally Enforceable Permit Established Herein	3.B.8	PM/PM ₁₀	3.90 lbs/hr, 17.08 TPY
	APC-S-1, Section 4.1(a)	3.B.2	SO_2	4.8 lbs/MMBTU or as otherwise limited by facility modification restrictions
	APC-S-1, Section 3.6(a)	3.B.3	PM/PM_{10}	$E = 4.1p^{0.67}$
	Construction Permit issued on October 8, 1997.	3.B.5	PM/PM ₁₀	2.97 lbs/hr, 12.41 TPY
AC-018	APC-S-1, Section 4.1(a)	3.B.2	SO_2	4.8 lbs/MMBTU or as otherwise limited by facility modification restrictions
	APC-S-1, Section 3.6(a)	3.B.3	PM/PM_{10}	$E = 4.1p^{0.67}$
AC-024, AC-025, AC-026, AC-027, AC-028, AD-001, AF-001, AG-001,	APC-S-1, Section 3.6(a)	3.B.3	PM/PM ₁₀	$E = 4.1p^{0.67}$
	APC-S-1, Section 3.4(a)(1)	3.B.9	PM/PM ₁₀	Emissions shall not exceed 0.6 lb/MMBTU per hour heat input
AE-001	APC-S-1, Section 4.1(a)	3.B.2	SO_2	4.8 lbs/MMBTU or as otherwise limited by facility modification restrictions
	NESHAP, 40 CFR 63, Subpart ZZZZ 40 CFR 63.6585, 40 CFR 63.6590(a)(1)(iii), 40 CFR 63.6640(f), and 40 CFR 63.6675	3.B.12	НАР	NESHAP applicability

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Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
	NESHAP, 40 CFR 63, Subpart ZZZZ 40 CFR 63.6603(a), 40 CFR 63.6625(i), and Table 2d	3.B.13	НАР	Perform scheduled maintenance
	NESHAP, 40 CFR 63, Subpart ZZZZ 40 CFR 63.6605	3.B.14	НАР	Comply with all applicable requirements of Subpart ZZZZ and operate and maintain the engine in a manner consistent with safety and good air pollution control practices for minimizing emissions.
	NESHAP, 40 CFR 63, Subpart ZZZZ 40 CFR 63.6625(e), 40 CFR 63.6640(a), and Table 6	3.B.15	НАР	Operate and maintain the engine according to the manufacturer's emission-related written instructions or develop and follow a maintenance plan
	NESHAP, 40 CFR 63, Subpart ZZZZ 40 CFR 63.6603(a), 40 CFR 63.6625(h), and Table 2d	3.B.16	НАР	Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes

3.B.1 The maximum permissible emission of ash and/or particulate matter for emission point 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 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.: APC-S-1 Section 4.1(a))
- 3.B.3 Except as otherwise specified, no person shall 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.4 For Emission Points AC-001, AC-007 (TPY), and AC-011, the permittee shall comply with the limits established in the Federally Enforceable Construction Permit issued on June 30, 1999. Emission Point AC-007 shall comply with the lb/hr limit as modified by Title V Operating Permit issued August 9, 2013.
- 3.B.5 For Emission Points AC-013, AC-014, and AC-018, the permittee shall comply with the limits established in the Federally Enforceable Construction Permit issued on October 8, 1997.
- 3.B.6 For Emission Point AB-002, AB-003, AB-004, AB-005, AB-006, and AB-007, the permittee shall combust only pipeline quality natural gas. (Ref.: Federally Enforceable Permit Established Herein)
- 3.B.7 For Emission Point AC-012, the permittee shall comply with the limits established in the Federally Enforceable Construction Permit issued on June 30, 1999 and modified with the Federally Enforceable Permit Established Herein.
- 3.B.8 For Emission Point AC-015, the permittee shall comply with the limits established in the Federally Enforceable Construction Permit issued on October 8, 1997 and modified with the Federally Enforceable Permit Established Herein.
- 3.B.9 For Emission Point AE-001, the maximum permissible emission of ash and/or particulate matter from each fossil fuel burning installation 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.10 For Emission Point AB-002, AB-003, AB-004, AB-005, AB-006, and AB-007, the permittee is subject to NSPS of 40 CFR 60.40c. Specifically, the five natural gas fired boilers rated at 11.964 MMBTU/hr each are subject to the monitoring, recordkeeping, and reporting requirements of 40 CFR 60.48c (a), (g)(2) and/or (g)(3), and (j).
- 3.B.11 For Emission Point AC-007, the permittee must limit the hours of operation to no more than 2,485 hours per year on a rolling consecutive twelve month basis. (Ref.: Title V Operating Permit issued August 9, 2013.
- 3.B.12 For Emission Point AE-001, the permittee is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ. This unit is an existing compression ignition emergency stationary RICE with a displacement of less than 30 liters/cylinder located at an area source of HAP emissions. The permittee shall operate the engine according to the requirements in (a) (c) below:

- (a) There is no limit on the use of the engine during emergency situations.
- (b) The engine may operate for any combination of the purposes specified in paragraphs (1) (3) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) counts as part of the 100 hours per calendar year allowed by this paragraph.
 - (1) The engine may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engines. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
 - (2) The engine may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (3) The engine may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (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 per calendar year for maintenance and testing and emergency demand response provided in paragraph (b). Except at provided in paragraphs (1) and (2) below, 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.
 - (1) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.
 - (2) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

- (ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (iv) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (v) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee.

If the emergency engine is not operated according to the requirements in (a) - (c) above, the engine will not be considered an emergency engine under this subpart and will need to meet the applicable requirements for non-emergency engines. (Ref.: 40 CFR 63.6585, 63.6590(a)(1)(iii), 63.6640(f), & 63.6675)

- 3.B.13 For Emission Point AE-001, the permittee shall comply with the following requirements:
 - (a) Change oil and filter every 500 hours of operation or annually, whichever comes first, or perform an oil analysis at the same frequency in order to extend the oil change requirement. At a minimum, the parameters listed in (1)–(3), below, shall be analyzed; and, if any of the limits are exceeded, change the oil within two business days of receiving the results of the analysis. If the engine is not in operation when the results are received, change the oil within two business days or before commencing operation, whichever is later. The oil analysis program must be included in the engine's maintenance plan required by Condition 3.B.15;
 - (1) Total Base Number is less than 30 percent of the Total Base Number of the oil when new.
 - (2) Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new.
 - (3) Percent water content (by volume) is greater than 0.5.
 - (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
 - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practices according to the schedule listed in (a)–(c) above, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. (Ref.: 40 CFR 63.6603(a), 63.6625(i), and Table 2d of Subpart ZZZZ)

- 3.B.14 For Emission Point AE-001, the permittee shall, at all times, be in compliance with the applicable requirements of Subpart ZZZZ and operate and maintain the engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (Ref.: 40 CFR 63.6605)
- 3.B.15 For Emission Point AE-001, the permittee shall operate and maintain the engine according to the manufacturer's emission-related written instructions or develop and follow a maintenance plan which provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution practice for minimizing emissions. (Ref.: 40 CFR 63.6625(e), 63.6640(a), and Table 6 of Subpart ZZZZ)
- 3.B.16 For Emission Point AE-001, the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. (Ref.: 40 CFR 63.6603(a), 63.6625(h), and Table 2d of Subpart ZZZZ)

C. <u>Insignificant and Trivial Activity Emission Limitations & Standards</u>

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
APC-S-1, Section 3.4(a)(1)	3.C.1 & 1.19	PM	0.6 lbs/MMBTU or as otherwise limited by facility modification restrictions
APC-S-1, Section 4.1(a)	3.C.2 & 1.19	SO_2	4.8 lbs/MMBTU or as otherwise limited by facility modification restrictions
APC-S-1, Section 3.6(a)	3.C.3 & 1.19	PM	$E = 4.1(p)^{0.67}$

- 3.C.1 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.C.2 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.: APC-S-1, Section 4.1(a))
- 3.C.3 Except as otherwise specified, no person shall 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

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

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))

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 of EPA Region IV 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 & REPORTING REQUIREMENTS

- A. <u>General Monitoring, Recordkeeping and Reporting Requirements</u>
- 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. Said report shall be made 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. <u>Specific Monitoring and Recordkeeping Requirements</u>

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AC-001, AC-015	PM/PM10, Opacity	Permittee shall comply with the compliance assurance monitoring requirements of the CAM plan contained in Appendix B.	5.B.1 and Appendix B	40 CFR 64
AB-002, AB-003, AB-004, AB-005, AB-006, AB-007	PM, SO2	Maintain monthly records of the total fuel used by the six natural gas-fired boilers individually or combined on a monthly basis.	5.B.2	40 CFR 60.48c(g)(2) and/or (g)(3)
AC-001, AC-015	PM/PM10, Opacity	Permittee shall perform stack testing for PM to demonstrate compliance with the PM limits and to verify the performance indicator ranges for differential pressure for each of the CAM affected control devices on a biennial basis.	5.B.4 and Appendix B	Federally Enforceable Permit Established Herein & 40 CFR 64
AC-007, AC-013, AC-014, AC-018, AF-001	Opacity	Permittee shall perform weekly opacity observations for these emission points and if visible emissions are observed, then perform a 6-minute VEE in accordance with EPA Method 9.	5.B.3	Federally Enforceable Permit Established Herein
AC-007, AC-013, AC-014, AC-018, AF-001	PM/PM10	Permittee shall perform a stack test for PM, once during the term of this permit to demonstrate compliance with the PM limits.	5.B.5	Federally Enforceable Permit Established Herein
AC-007, AC-013, AC-014, AC-018, AF-001	PM	Weekly inspections of control devices and performance of required maintenance.	5.B.6	Federally Enforceable Permit Established Herein
AC-007	Hours of Operation	Maintain monthly records of the total hours of operation on a rolling, consecutive 12-month basis.	5.B.10	Federally Enforceable Permit Established Herein
AC-024, AC-025, AC-026, AC-027, AC-028	PM/PM10	Permittee shall operate equipment in accordance with manufacturer design and specifications.	5.B.11	Federally Enforceable Permit Established Herein
AE-001	Recordkeeping Requirements	Maintain records of notifications and reports submitted, the occurrence and duration of malfunctions and actions taken to minimize emissions during malfunctions, all maintenance conducted, documentation of the oil analysis program, if one is used, and the hours and type of operation.	5.B.12	40 CFR 63, Subpart ZZZZ §63.6625(i) and §63.6655(a) and (d)-(f)
	Recordkeeping Requirements	Keep records in a form readily available for review.	5.B.13	40 CFR 63, Subpart ZZZZ, §63.6660

- 5.B.1 For Emission Points AC-001, and AC-015, the permittee shall conduct compliance assurance monitoring (CAM) for PM in accordance with the CAM plan found in Appendix B. For each excursion, the permittee shall document the event and the corrective actions taken. The permittee shall also comply with the applicable CAM requirements set forth in 40 CFR Part 64 specifically, the permittee shall conduct required monitoring and recordkeeping in accordance with 64.7 through 64.9.
- 5.B.2 For Emission Point AB-002, AB-003, AB-004, AB-005, AB-006, and AB-007, in accordance with the requirements of 40 CFR 60.48c(g)(2) and/or (g)(3), the permittee shall monitor and maintain records of the total gas used by each of the five boilers (or total used for all boilers) on a monthly basis. These records must be maintained in a log form, which may be electronically, and must be available for review by MDEQ during subsequent inspections.
- 5.B.3 For emission points AC-007, AC-013, AC-014, AC-018, and AF-001 the permittee shall assure compliance with the opacity limitations by weekly observations of emissions from the exhaust stacks of these units. If any visible emissions are detected, EPA Reference Method 9 shall be performed. If conditions are such that opacity readings cannot be taken using observations of Method 9, the permittee shall note these conditions in the record and provide an explanation of why it was not possible to perform opacity readings/observations. (Ref: Federally Enforceable Permit Established Herein)
- 5.B.4 For emission points AC-001 and AC-015, the permittee shall demonstrate compliance with particulate matter emission limitations and opacity limitations by stack testing in accordance with EPA Reference Methods 1-5 and 9, respectively. The testing shall be performed to demonstrate compliance with permit limits as well as verify the performance indicator ranges for differential pressure for the referenced CAM affected emission points on a biennial basis beginning in calendar year 2011. For the purpose of compliance demonstration, the permittee shall test while operating the sources within 90% of their maximum capacity.

The permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the DEQ. Also, the DEQ shall be notified in writing at least ten (10) days prior to the scheduled test date(s) so that an observer may be afforded the opportunity to witness the test(s).

After the first successful submittal of an initial written test protocol in conjunction with the initial compliance test(s), the permittee may request that the resubmittal of a testing protocol be waived for subsequent testing by certifying in writing at least thirty (30) days prior to subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed. (Ref: Federally Enforceable Permit Established Herein)

- 5.B.5 For Emission Points AC-007, AC-013, AC-014, AC-018 and AF-001, the permittee shall demonstrate compliance with particulate matter emission limitations by stack testing in accordance with EPA Reference Methods 1-5, respectively. The testing shall be performed once during the term of this permit. For the purpose of compliance demonstration, the permittee shall test while operating the sources within 90% of their maximum capacity.
 - The permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the DEQ. Also, the DEQ shall be notified in writing at least ten (10) days prior to the scheduled test date(s) so that an observer may be afforded the opportunity to witness the test(s).
- 5.B.6 For Emission Points AC-007, AC-013, AC-014, AC-018, and AF-001; the permittee shall perform weekly inspections of the air pollution control equipment. Maintenance shall be performed as necessary to maintain proper operation of the pollution control equipment. Records of weekly inspections and any maintenance performed shall be kept in log form and made available for review upon request by Office of Pollution Control personnel. The permittee shall maintain on hand at all times sufficient equipment as is necessary to repair and/or replace the pollution control equipment.
- 5.B.7 The permittee shall conduct the required monitoring at all times that Emission Points AC-001 and AC-015 are in operation, with the exception of periods when the monitoring equipment is under repair, maintenance, or required QA/QC. (40 CFR 64.7(c))
- 5.B.8 For Emission Points AC-001 and AC-015, the permittee shall maintain the necessary parts for routine repairs of the monitoring equipment (40 CFR 64.7 (b))
- 5.B.9 The permittee shall, upon detecting an excursion or exceedance, restore operation of Emission Points AC-001 and AC-015 to its normal manner of operation as soon as possible. The response shall include minimizing periods of startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the recurrence of the exceedance or excursion. (Ref: 40 CFR 64.7 (d)(1))
- 5.B.10 For Emission Point AC-007, the permittee shall record and log the total hours of operation per month and maintain a rolling 12-month total of hours of operation. (Ref: Federally Enforceable Permit Established Herein)
- 5.B.11 For Emission Points AC-024, AC-025, AC-026, AC-027, and AC-028, the permittee shall operate equipment in accordance with manufacturer design and specifications. Maintenance shall be performed as necessary to maintain proper operation of the equipment. Records of any maintenance performed shall be kept in log form and made available for review upon request by Office of Pollution Control personnel.
- 5.B.12 For Emission Point AE-001, the permittee shall keep the following records:

- (a) A copy of each report submitted to comply with 40 CFR 63, Subpart ZZZZ;
- (b) Documentation of each occurrence and the duration of malfunctions of operations (i.e., process equipment) or air pollution control and monitoring equipment and the actions taken to minimize emissions during the malfunction, as required by Condition 3.B.14, including corrective actions to restore the equipment to normal operation;
- (c) Documentation of the maintenance conducted on the engine in order to demonstrate that the engine is being operated and maintained according to the manufacturer's emission-related operation and maintenance instructions or your own maintenance plan as required by Condition 3.B.15;
- (d) If using an oil analysis program as described in Condition 3.B.13, documentation of the parameters that were analyzed, the results of the analysis, and the oil changes for the engine;
- (e) Documentation of the hours of operation of the engine that is recorded through the non-resettable hour meter. The records must indicate how many hours are spent in emergency operation, including what classified the operation as emergency, and how many hours are spent in non-emergency operation. If the engine is used for the purposes specified in Condition 3.B.12(b)(2) or (3) or (c)(2), keep records of the notification of the emergency situation and the date, start time, and end time of engine operation for these purposes. (Ref.: 40 CFR 63.6625(i) and 63.6655(a) and (d)-(f)
- 5.B.13 For Emission Point AE-001, the permittee shall keep records in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1).

The permittee shall keep readily accessible records in hard copy or electronic form for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). (Ref.: 40 CFR 63.6600)

C. Specific Reporting Requirements

Emission Point(s)	Pollutant/Parameter Monitored	Reporting Requirement	Condition Number	Applicable Requirement
AC-001, AC-015	PM/PM10; Opacity	Permittee shall comply with the compliance assurance monitoring requirements of the CAM plan contained in Appendix B.	5.C.1 and Appendix B	40 CFR 64
AB-002, AB-003, AB-004, AB-005, AB-006, AB-007	PM, SO2	Submit semi-annual reports of the total fuel used by the six natural gas-fired boilers individually or combined and summarized on a monthly basis.	5.C.2	40 CFR 60.48c(j)
AC-007, AC-013, AC-014, AC-018, AF-001	Opacity	Submit semi-annual reports of the weekly visible emissions checks and any VEEs performed.	5.C.3	Federally Enforceable Permit Established Herein
AC-001, AC-015	PM	Submit stack test report within 45 days of date of stack test. Submit the results of the monitoring for differential pressure performed during the PM stack tests for each CAM affected unit.	5.C.4	Federally Enforceable Permit Established Herein
AC-007, AC-013, AC-014, AC-018, AF-001	PM	Submit stack test report within 45 days of date of stack test.	5.C.5	Federally Enforceable Permit Established Herein
AC-001, AC-015	PM	Submit semi-annual reports for each CAM affected unit to document compliance with the facility's CAM plan.	5.C.6	Federally Enforceable Permit Established Herein
AC-007	Hours of Operation	Submit semi-annual reports of the total hours of operation on a rolling, consecutive 12-month basis.	5.C.7	Federally Enforceable Permit Established Herein
AE-001	Emission and Operating Limitation Deviations Reporting	Reporting Requirements	5.C.8	40 CFR 63, Subpart ZZZZ, §63.6640(b) and Table 2d
	Compliance Report	Reporting Requirements	5.C.9	40 CFR 63, Subpart ZZZZ, §63.6640(e)

- 5.C.1 For Emission Points AC-001 and AC-015, the permittee shall submit semi-annual reports summarizing each excursion as defined by the CAM plan of Appendix B and the associated corrective actions taken in accordance with condition 5.A.4.
- 5.C.2 For Emission Point AB-002, AB-003, AB-004, AB-005, AB-006, and AB-007, in accordance with the requirements of 40 CFR 60.48c(j) the permittee shall submit semi-annual reports summarizing the monthly fuel usage in accordance with condition 5.A.4.

- 5.C.3 For Emission Points AC-007, AC-013, AC-014, AC-018 and AF-001, the permittee shall submit a summary report in accordance with Condition 5.A.4 of this permit of the weekly visible emissions observations and any Visible Emissions Evaluations performed via Method 9.
- 5.C.4 For emission points AC-001 and AC-015, the permittee shall submit the results of the stack tests required by Condition 5.B.4 within 45 days from the date of the stack test. Additionally, the permittee shall submit the summarized results of the monitoring for differential pressure performed during each PM stack tests for each CAM affected unit. The permittee shall submit and request revisions necessary to the CAM plan for any of the performance indicator ranges for each of the units tested. Once approved by the MDEQ, the permittee shall utilize the newly established performance indicator ranges for those emission units.
- 5.C.5 For Emission Points AC-007, AC-013, AC-014, AC-018 and AF-001, the permittee shall submit the results of the stack tests required by Condition 5.B.5 within 45 days from the date of the stack test.
- 5.C.6 For Emission Points AC-001 and AC-015, the permittee shall submit monitoring reports to demonstrate compliance with the facility's CAM plan semiannually, in accordance with Section 5.A.4 of this permit. These reports shall include, at a minimum:
 - (a) summary information on the number, duration, and cause of excursions or exceedances and the corrective actions taken;
 - (b) summary information on the number, duration, and cause for monitors down time incidents associated with calibration checks;
 - (c) Description of the actions taken to implement a Quality Improvement Plant (QIP) during the reporting period, if a QIP has been requested by MDEQ, as specified in 40 CFR 64.8. A QIP may be required by MDEQ based on the actions taken by the permittee in the event of an excursion or exceedance. (Ref : 40 CFR 64.9)
- 5.C.7 For Emission Point AC-007, the permittee shall submit semi-annual reports in accordance with Section 5.A.4 of this permit, summarizing the total hours of operation shown on a rolling consecutive twelve-month basis.
- 5.C.8 For Emission Point AE-001, the permittee shall report each instance in which the management practices listed in Condition 3.B.13 were not met. These instances are deviations and must be reported within five (5) business days in accordance with Condition 5.A.5. If the management practices were not performed on the required schedule because it posed an unacceptable risk under Federal, State, or local law at the time of the required scheduled maintenance, the report must include the Federal, State, or local law under which the risk was deemed unacceptable. (Ref.: 40 CFR 63.6640(b) and Table 2d of Subpart ZZZZ)
- 5.C.9 For Emission Point AE-001, the permittee shall report each instance in which the applicable requirements of Table 8 of Subpart ZZZZ were not met, in accordance with Condition 5.A.4. (Ref.: 40 CFR 63.6640(e))

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 – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at http://ecfr.gpoaccess.gov under Title 40, or DEQ shall provide a copy upon request from the permittee.

- 7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A Production and Consumption Controls.
- 7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B Servicing of Motor Vehicle Air Conditioners.
- 7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:
 - (a) All containers in which a class I or class II substance is stored or transported;
 - (b) All products containing a class I substance; and
 - (c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.
- 7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F Recycling and Emissions Reduction:
 - (a) Servicing, maintaining, or repairing appliances;
 - (b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or
 - (c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery

equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.
- 7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H Halon Emissions Reduction:
 - (a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;
 - (b) Any person disposing of halons;
 - (c) Manufacturers of halon blends; or
 - (d) Organizations that employ technicians who service halon-containing equipment.

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
НР	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
NMVOC	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 Φm 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

Mars Food US, LLC

Compliance Assurance Monitoring Plan

I. <u>Background</u>

A. Emissions Unit

Description: Controlled Equipment as follows

APCD ID: AC-001, AC-015
Facility: Mars Food US, LLC

Greenville, MS

B. Applicable Regulation, Emission Limits, and Monitoring Requirements

Regulation: Operating Permit

Emission limits:

AC-001 6.35 #/hr PM, 27.81 Tons/Year

AC-015 3.9 #/hr PM, 17.08 Tons/Year

Opacity: 40 percent

Particulate matter: E=4.1p^{0.67}, tons per year

Particulate Matter < 10 microns

Monitoring requirements: Visible emissions (VE), pressure drop,

inspection and maintenance program,

particulate 12-month rolling total

C. Control Technology

Baghouses

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1.

MONITORING APPROACH JUSTIFICATION

I. Background

The facility produces finished rice from rough rice. Throughout the process, certain foreign material such as debris, stalks, rice hulls, bran, and dust are removed and sent to collection bins. Particulate matter emissions from these processes are controlled by baghouses and cyclones.

The monitoring approach outlined here applies to all covered control equipment.

II. Rationale for Selection of Performance Indicators

Visible emissions (opacity) was selected as a performance indicator because it is indicative of good operation and maintenance of baghouses and cyclones. When the control equipment is operating optimally, there will be little or no visible emissions from the exhaust. In general, an increase in visible emissions indicates reduced performance of the equipment (e.g., loose or torn bags in a baghouse). These emission units have an opacity standard of 40 percent. A 6-minute Method 9 observation is performed if visible emissions are detected.

The pressure drop through each baghouse is monitored daily. An increase in pressure drop can indicate that the cleaning cycle is not frequent enough, cleaning equipment is damaged, or the bags are becoming blinded. Decreases in pressure drop may indicate significant holes and tears or missing bags. However, opacity is a much more sensitive indicator of holes and tears than pressure drop. The pressure drop will show that the baghouse is working and a working baghouse will assure that the hourly emissions are met. If the hourly emissions are met then annual emissions will be met since they are based on 8,760 hours per year.

Implementation of a control equipment inspection and maintenance (I/M) program provides assurance that the equipment is in good repair and operating properly. Proper operation of the cleaning cycle facilitates gas flow through the baghouse or cyclone and the removal of particulate. Operation of baghouses at low pressures can result in inadequate cleaning, especially near the bottoms of the bags.

All performance indicators are included in the current operating permit.

III. Rationale for Selection of Indicator Ranges

The selected indicator range is no visible emissions. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An indicator range of no visible emissions was selected because an increase in visible emissions is indicative of an increase in particulate emissions. In addition, a Method 9 Observation will be conducted upon the detection of visible emissions to determine whether opacity levels are below forty (40) percent.

The indicator range for baghouses is an abnormal pressure drop. When a problem with the baghouse is detected during an inspection, the problem is recorded on the inspection log and corrective action is initiated immediately.

Table 1 Monitoring Approach

	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator	Visible emissions	Pressure drop	Inspection/maintenance
II. Measurement Approach	Visible emissions from all covered emission sources will be monitored daily	Pressure drop through each covered baghouse is measured daily	Daily inspection of control equipment and the boiler according to I/M checklist; maintenance performed as needed.
III. Indicator Range	An excursion is defined as the presence of visible emissions. Excursions trigger a Method 9 test, inspection, corrective action and reporting requirement.	An excursion is defined as the pressure drop being below or above the appropriate operating range that will assure compliance. Pressure drops approaching the lower or higher range trigger an inspection and corrective action.	NA
IV. Performance Criteria			
A. Data Representativeness	Observations are performed at the control equipment exhaust while the equipment is operating.	Pressure drop across each baghouse is measured at the baghouse inlet and exhaust.	Inspections are performed at the control equipment and boiler.
B. Verification of Operational Status	NA S	NA	NA
C. QA/QC Practices and Criteria	Observer is certified semi-annually.	Pressure gauge monitored for calibration	Qualified personnel perform inspection.
D. Monitoring frequency	Daily 6-minute observation.	Pressure drop is measured daily	Daily inspection.
E. Data Collection Procedures	The VE observation, & Method 9 results if applicable, are documented by the observer	Pressure drop is manually recorded daily	Records are maintained to document the daily inspection and any required maintenance.

Table 1 Monitoring Approach

	Indicator No. 1	Indicator No. 2	Indicator No. 3
F. Averaging Period	6 minutes	NA	NA
G. Range of Operation (To be verified at next biennial stack test)	40% Except 15 minutes per startup in any one (1) hour not-to- exceed three (3) startups per stack in any 24-hour period. Sixty percent (60%) during soot blowing for ten (10) minutes per million BTU/hr in a 24-hour period.	AC-001 Bran dust baghouse 0.1 – 6.0"H ₂ 0 Packaging baghouse 0.1 – 6.0" H ₂ 0 Cargo brown baghouse 0.1– 6.0" H ₂ 0 AC-015 PFB Column Dryer/PFB Bran Baghouse 0.1 – 6.0" H ₂ 0	NA NA