STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

DAK Americas Mississippi Inc 3303 Port and Harbor Drive Port Bienville Industrial Park Bay St. Louis, Mississippi Hancock 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:	
Effective Date: As specified herein.	
MISSISSIPPI ENVIRONME	NTAL QUALITY PERMIT BOARD
AUTHORI	ZED SIGNATURE
MISSISSIPPI DEPARTMENT	OF ENVIRONMENTAL QUALITY
Expires:[Date not to exceed 5 yrs from iss	uance] Permit No.: 1000-00039

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APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT

OTHER IMPORTANT DOCUMENTS:

40 CFR 60, SUBPART Dc – STANDARDS OF PERFORMANCE FOR SMALL INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS

40 CFR 63, SUBPART JJJ – NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS GROUP IV POLYMERS AND RESINS

40 CFR 63, SUBPART ZZZZ – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES

40 CFR 63, SUBPART DDDDD – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR MAJOR SOURCES: INDUSTRIAL, COMMERCIAL, AND INSTITUTIONAL BOILERS AND PROCESS HEATERS

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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(c).)
- 1.4 (a) This permit shall be reopened and revised under any of the following circumstances:
 - (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.
 - (2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
 - (4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
 - (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

(c) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the DEQ at least 30 days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.G)

- 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)
- 1.6 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)
- 1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)
- 1.8 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 11 Miss. Admin. Code Pt. 2, Ch. 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.: 11 Miss. Admin. Code Pt. 2, R. 6.6.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.: 11 Miss. Admin. Code Pt. 2, R. 6.6.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.: 11 Miss. Admin. Code Pt. 2, R. 6.6.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.: 11 Miss. Admin. Code Pt. 2, R. 6.6.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.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)
- 1.9 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)
- 1.10 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.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)
- 1.11 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)
- 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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)
- 1.13 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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)
- 1.14 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)
- 1.15 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)
- 1.16 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)
- 1.17 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.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2)., R. 6.4.B., and R. 6.2.A(1)(c).)
- 1.18 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.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)
- 1.19 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 11 Miss. Admin. Code Pt. 2, Ch. 3., "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

- 1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 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."
- 1.21 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)
- 1.22 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)
- 1.23 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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)
- 1.24 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)
- 1.25 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 11 Miss. Admin. Code Pt. 2, R. 1.2.KK.)
 - (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 11 Miss. Admin. Code Pt. 2, R. 1.2.HH. & R. 1.2.CC.)
 - (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.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

1.26 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 11 Miss Admin. Code Pt. 2, R. 1.8. 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 ID	Equipment ID	Description			
	FUEL BURNING EQUIPMENT				
AA-001	Y71-01-HF-04	68 MMBTU/hr Heat Transfer Medium (HTM) Heater equipped with Low NOx burners and Flue Gas Recirculation (FGR). Each unit burns as fuel natural gas and process vent streams from the Esterfication (Lines H1, H2, and L1) Process.			
AA-002	Y71-02-HF-04	68 MMBTU/hr Heat Transfer Medium (HTM) Heater equipped with Low NOx burners and Flue Gas Recirculation (FGR). Each unit burns as fuel natural gas and process vent streams from the Esterfication (Lines H1, H2, and L1) Process.			
AA-003	Y71-03-HF-04	68 MMBTU/hr Heat Transfer Medium (HTM) Heater equipped with Low NOx burners and Flue Gas Recirculation (FGR). Each unit burns as fuel natural gas and process vent streams from the Esterification (Lines H1, H2, and L1) Process.			
AA-004	U21-01-BR-02	100 MMBTU/hr Boiler equipped with Low NOx burners and Flue Gas Recirculation (FGR). Each unit burns as fuel natural gas and process vent streams from the Esterification (Lines H1, H2, and L1) Process. Subject to Major Source Boiler MACT, Subpart DDDDD.			
AA-005	U21-02-BR-02	27 MMBTU/hr Boiler equipped with Low NOx burners and Flue Gas Recirculation (FGR). Each unit burns as fuel natural gas and process vent streams from the Esterification (Lines H1, H2, and L1) Process. Subject to Major Source Boiler MACT, Subpart DDDDD.			
AA-006	U21-03-BR-02	100 MMBTU/hr Boiler equipped with Low NOx burners and Flue Gas Recirculation (FGR). Each unit burns as fuel natural gas and process vent streams from the Esterification (Lines H1, H2, and L1) Process. Subject to Major Source Boiler MACT, Subpart DDDDD.			
AA-007	Y12-00-PU-02	305 hp Diesel-fired Firewater Pump. Installed in 1997. Subject to Subpart ZZZZ			
AA-009	K92-00-GG-02	500 kW Diesel-fired Emergency Generator. Installed in 1997. Subject to Subpart ZZZZ			
AA-010	F92-00-GG-02	500 kW Diesel-fired Emergency Generator. Installed in 1997. Subject to Subpart ZZZZ			
AA-011	DO-1	0.5 MMBTU/hr Natural Gas-fired Drying Oven for Pack Cleaning Process			
AA-012	CO-1	0.66 MMBTU/hr Natural Gas-fired Heat Cleaning Oven #1 for Pack Cleaning Process			
AA-013	CO-2	0.66 MMBTU/hr Natural Gas-fired Heat Cleaning Oven #2 for Pack Cleaning Process			
AA-021	C92-00-GG-04	135 kW Diesel-fired Emergency Generator. Installed in 1997. Subpart to Subpart ZZZZ.			
LINE 1 ESTERIFICATION (H1) Emissions are routed to the Boilers or Heaters for 99.5% destruction.					

Emission Point	Equipment ID	Description	
ID			
AB-001	H21-01-TW-23	Process Column H1	
	H21-01-RR-18	Primary Esterifier H1	
	H21-01-RR-21	Secondary Esterifier H1	
	LO11-01-HX-02	Low Polymerization Spray Condenser H1 (PP1 Scraper Condenser)	
	L11-01-PK-51	3-State EG Intercondenser H1	
AB-001 (cont.)	L11-01-RR-01	LP Vacuum Pump Vent H1	
	L11-01-HX-16	Intermediate Polymerization (IP) Spray Condenser H1 (PP2 Scraper Condenser)	
	L11-01-HX-33	High Polymerization (HP) Spray Condenser H1 (DRR Scraper Condenser)	
	L11-01-RR-11	IP Vacuum Pump Vent H1	
	L11-01-RR-31	HP Vacuum Pump Vent H1	
	LIN	NE 1 SOLID STATE POLYMERIZATION (SSP) (P1)	
AB-002	F22-01-SL-10 (A-F)	Six (6) SSP Pre-Storage Bins for Line H1/P1. Storage of amorphous chip product. Emissions are vented to a single baghouse (F-22-01-BH-13)	
AB-003	F22-01-SL-17 and 20	SSP Intermediate Chip and Waste Chip Storage Line P1. Emissions are vented to a single baghouse (F22-01-BH-24)	
AB-004	F-41-01-SL-25 (A-E), 35 (A-E), 45 (A-D), and 50	Fifteen (15) SSP Storage Bins for Line P1 and P3. Emission are vented to a single baghouse (F41-01-BH-27)	
AB-005	P41-01-DD-06	Line H1 SSP Elutriator with an inherent cyclone (P41-01-CX-04) for chip size segregation and removal of PET fines from the product stream.	
AB-006	P43-01-SC-01	Pre-Crystallizer Feed Silo H1 that feeds chips into the Crystallization Process. Emissions are controlled by a baghouse (P41-01-BH-09).	
AB-007	P43-01-CZ-11	Pre-Crystallizer H1 with an inherent baghouse used to remove PET fines from air that recirculates through the crystallization process.	
	P43-01-CZ-38	Crystallizer H1 with an inherent baghouse used to remove PET fines from air that recirculates through the crystallization process.	
AB-008	P44-01-HX-60	Product Cooler H1 equipped with a cyclone for SSP cooling of polymerized chips from pre-heater.	
AB-009	P44-01-HO-01	Pre-heater Feed Hopper H1 equipped with a baghouse.	

Emission Point ID	Equipment ID	Description	
AB-010	F33-00-VR-03	SSP Railcar unloading of supplementary polyethylene terephthalate (PET) bottle resin chips H1.	
AB-011	L12-01-SL-12	Chip Receiving Hopper H1	
L	INE II ESTERIFICATI	ON (H2) Emissions are routed to the Boiler or Heaters for 99.5% destruction	
AC-001	H21-02-TW-23	Process Column H2	
	H21-02-RR-18	Primary Esterifier H2	
AC-001 (cont.)	H21-02-RR-21	Secondary Esterifier H2	
	L11-02-HX-02	Low Polymerization Spray Condenser H2 (PP1 Scraper Condenser)	
	L11-02-PK-51	3-Stage EG Intercondenser H2	
	L11-02-RR-01	LP Vacuum Pump Bent H2	
	L11-01-HX-16	Intermediate Polymerization Spray Condenser H2 (PP2 Scraper Condenser)	
	L11-01-HX-33	High Polymerization Spray Condenser H2 (DRR Scraper Condenser)	
	L11-02-RR-11	IP Vacuum Pump Vent H2	
	L11-02-RR-31	HP Vacuum Pump Vent H2	
		LINE II SOLID STATE POLYMERIZATION (P2)	
AC-002	F22-02-SL-10 (A-F)	Six (6) SSP Pre-Storage Bins for Line H2/P2 storage of amorphous chip product. Emissions are vented to a single baghouse (F22-02-BH-13)	
AC-003	F22-02-SL-17 and 20	Intermediate Chip and Waste Chip Storage for Line P2. Emissions are vented to a single baghouse (F22-01-BH-24)	
AC-004	F41-02-SL-25(A- E), 35(A-E), 45(A- D), and 50	Fifteen (15) SSP Storage Bins for Line P2. Emissions are vented to a single baghouse (F41-02-BH-27)	
AC-005	P41-02-DD-06	Line H2 SSP Elutriator equipped with a baghouse (F41-02-BH-09)	
AC-006	P43-02-SC-01	Pre-Crystallizer Feed Silo H2 that feeds chips into the Crystallization Process. Emissions are controlled by a particulate filter (P43-02-FL-134) to control particulate emissions.	
AC-007	P43-02-CZ-11	Pre-crystallizer H2 with an inherent baghouse used to remove PET fines from air that recirculates through the crystallization process.	

Emission Point	Equipment ID	Description	
ID			
	P43-02-CZ-38	Crystallizer H2 with an inherent baghouse used to remove PET fines from air that recirculates through the crystallization process.	
AC-008	P44-02-HX-60	Product Cooler H2 equipped with a cylone for SSP cooling of polymerized chips from preheater.	
AC-009	P44-02-HO-01	Pre-Heater Feed Hopper H2 equipped with a baghouse	
AC-010		SSP Railcar unloading of supplementary polyethylene terephthalate (PET) bottle resin chips H2.	
AC-011	L-12-02-SL-12	Chip Receiving Hopper H2	
]	LINE III ESTIFICATIO	ON (L2) Emissions are routed to the Boiler or Heaters for 99.5% destruction	
AD-001	L21-01-TW-23	Process Column L1	
	L21-01-RR-18	Primary Esterifier L1	
	L21-01-RR-21	Secondary Esterifier L1	
	L31-01-HX-02	Low Polymerization Spray Condenser L1 (PP1 Scraper Condenser)	
	L31-01-PK-51	3-Stage EG Intercondenser L1	
	L31-02-RR-01	LP Vacuum Pump Vent L1	
	L31-01-HX-16	Intermediate Polymermization Spray Condenser L1 (PP2 Scraper Condenser)	
	L31-01-HX-33	High Polymerization Spray Condenser L1 (DRR Scraper Condenser)	
	L31-01-RR-11	IP Vacuum Pump Vent L1	
	L31-01-RR-31	HP Vacuum Pump Vent L1	
		LINE III SOLID STATE POLYMERIZATION (P3)	
AD-002	L32-03-SL-12	Chip Receiving Hopper L1	
AD-003	F22-03-SL-10 (A-B)	Two (2) Amorphous Pre-Storage Bins used for Line P3 uses a particulate filter (F22-03-FL-13(A-B)) to control particulate emissions	
AD-004	F22-03-SL-17	Amorphous Chip Waste Bin for Line P3 uses a particulate filter (F22-03-FL-32) to contro particulate emissions	
AD-005	P43-03-SL-01	Pre-Crystallizer Feed Silo for Line P3 that meters chips into the crystallization process from the feed silo. Emissions are controlled by a particulate filter (F22-03-FL-134) to control particulate emissions	

Emission Point ID	Equipment ID	Description	
AD-006	P43-03-CZ-11 (A-B)	Pre-Crystallizer P3 equipped with two (2) baghouses. Three inherent baghouses used to remove PET fines from air that recirculates through the crystallization process.	
	P43-3-CZ-38	Crystallizer P3 equipped with a baghouse. Three inherent baghouses used to remove PET fines from air that recirculates through the crystallization process.	
AD-007	P44-03-HX-60	Product Cooler H2 equipped with a cylone for SSP cooling of polymerized chips from preheater.	
AD-008	P43-03-HO-137	Chip Surge Control Vessel P3	
		ETHYLENE GLYCOL RECOVERY UNIT	
AE-001	R34-01-PK-01	Ethylene Glycol Recovery Unit. Emissions from this process are vented to EP-401 through EP-406 for destruction. (Emissions are routed to the Boiler or Heaters for 99.5% destruction.)	
		RAW MATERIAL HANDLING	
AF-001	H48-01-PK-10	Additive Dump Station No. 1	
AF-002	H48-01-PK-14	Additive Dump Station No. 2	
AF-003	H48-01-PK-A	Additive Dump Station No. 3	
AF-004	H48-01-PK-B	Additive Dump Station No. 4	
AF-005	H21-01-SL-07, H21-02-SL-07, L21-01-SL-07, H21-01-SL-01, H21-02-SL-01, P45-01-BH-30, P45-02-BH-30, L21-01-SL-01, R21-00-BH-11, R21-00-BH-12, and R21-00-BH-13	Railcar, Truck, and Sea Bulk Container Unloading System is a "closed loop" system comprised of three (3) Terephthalic Acid (TPA) Feed Storage Silos, two (2) Isophthalic Acid (PIA) Feed Storage Silos, and five (5) baghouses.	
	V	VASTEWATER TREATMENT (Fugitive Emissions)	
AG-001		Wastewater Treatment	
		STAPLE FIBER PRODUCTION	
AH-001	EP-K01	Exhaust fan for Staple Fiber Production Lines #1 and #2	
AH-002	EP-K02	Exhaust fan for Staple Fiber Production Lines #3 and #4	

Emission Point ID	Equipment ID	Description			
AH-003		Quench air spinning machine for Staple Fiber spin line #1			
AH-004		Quench air spinning machine for Staple Fiber spin line #2			
AH-005		Quench air spinning machine for Staple Fiber spin line #3			
AH-006		Quench air spinning machine for Staple Fiber spin line #4			

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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.)
- 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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

B. <u>Emission Point Specific Emission Limitations & Standards</u>

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 AA-002 AA-003 AA-004 AA-005 AA-006	11 Miss. Admin. Code Pt. 2, R. 1.3(D)(1)(b)	3.B.1	PM	$E = 0.8808 * F^{0.1667}$

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 AA-002 AA-003 AA-004 AA-005 AA-006 AA-011 AA-012 AA-013	11 Miss. Admin. Code Pt. 2, R. 1.4(A)(1)	3.B.2	SO_2	4.8 lbs/MMBTU
AA-001 AA-002 AA-003	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	NO _x	9.90 lbs/hr (maximum hourly) and 36.25 tpy (The tpy limit is the total combined allowable emission limit for Emission Points AA-001, AA-002, and AA-003)
	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	СО	9.90 lbs/hr (maximum hourly) and 36.25 tpy (The tpy limit is the total combined allowable emission limit for Emission Points AA-001, AA-002, and AA-003)
		3.B.4	Fuel Restriction	Natural Gas (primary fuel) or Process Vent Streams from the Esterification (H1, H2, or L1) process and the Glycol Recovery Unit. Any process vent streams combusted in the boilers must be introduced simultaneously with the primary fuel.
				Total combined natural gas fuel usage for AA-001, AA-002, and AA-003 shall not exceed 1,450 MMcf/yr.
AA-001 AA-002 AA-003 AA-004 AA-005 AA-006	New Source Performance Standard for Small Industrial- Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc) and General Provisions (40 CFR 60, Subpart A); 40 CFR 60.42c	3.B.5		NSPS applicability only. These units only have to comply with daily fuel combustion records requirement for monitoring.
AA-004 AA-005 AA-006	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	NOx	14.56 lb/hr (maximum hourly) and 50.0 tpy (The tpy limit is the total combined allowable emission limit for Emission Points AA-004, AA-005, and AA-006.)
		3.B.3	SO_2	14.56 lb/hr (maximum hourly) and 50.0 tpy (The tpy limit is the total combined allowable emission limit for Emission Points AA-004, AA-005, and AA-006.)

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-004 AA-005 AA-006	AA-005 Construction Permit issued on	Construction Permit issued on October 8, 1996, and modified on	Fuel Restriction	Natural Gas (primary fuel) or Process Vent Streams from the Esterification (H1, H2, or L1) process and the Glycol Recovery Unit. Any process vent streams combusted in the boilers must be introduced simultaneously with the primary fuel.
				Total combined natural gas fuel usage for AA-004, AA-005, and AA-006 shall not exceed 2,000 MMcf/yr.
AA-011 AA-012 AA-013	11 Miss. Admin. Code Pt. 2, R. 1.3(D)(1)(a)	3.B.7	PM	0.6 lbs/MMBTU
AA-007	Federally Enforceable Construction Permit issued on	3.B.8	Fuel Restriction	Fuel other than Diesel prohibited.
	October 8, 1996, and modified on October 11, 2004		Restriction	Diesel fuel usage shall not exceed 3,840 gallons/year
AA-009 AA-010	Federally Enforceable Construction Permit issued on	3.B.9	3.B.9 Fuel Restriction	Fuel other than Diesel prohibited.
	October 8, 1996, and modified on October 11, 2004			Total combined diesel fuel usage for AA-009 and AA-010 shall not exceed 2,496 gallons/year.
AA-007 AA-009 AA-010 AA-021	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ) and General Provisions (40 CFR 63, Subpart A); 40 CFR 63.6602 Table 2c	3.B.10	Maintenance Requirements	Change oil and filter every 500 hours of operation or annually; inspect air cleaner every 1,000 hours of operation or annually; and inspect all hoses and belts every 500 hours of operation or annually.
AB-002 AB-003	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.21 lbs/hr and 0.94 tpy (Emission limitations applicable to each emission point.)
AB-004	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.65 lbs/hr and 2.83 tpy
AB-005	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.07 lbs/hr and 0.30 tpy

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AB-006	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.12 lbs/hr and 0.51 tpy
AB-007	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.10 lbs/hr and 0.44 tpy
AB-008	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.90 lbs/hr and 3.94 tpy
AB-009	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.05 lbs/hr and 0.23 tpy
AB-010	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.10 lbs/hr and 0.44 tpy
AB-011 AC-011 AF-001 AF-002 AF-003 AF-004 AH-001 AH-002 AH-003 AH-004 AH-005	11 Miss. Admin. Code Pt. 2, R. 1.3(F)(1)	3.B.11	PM/PM ₁₀	$E = 4.1(p)^{0.67}$
AC-002 AC-003	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.21 lbs/hr and 0.94 tpy (Emission limitations applicable to each emission point.)
AC-004	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.65 lbs/hr and 2.83 tpy

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AC-005	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.07 lbs/hr and 0.30 tpy
AC-006	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.12 lbs/hr and 0.52 tpy
AC-007	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.10 lbs/hr and 0.44 tpy
AC-008	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.90 lbs/hr and 3.94 tpy
AC-009	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.05 lbs/hr and 0.23 tpy
AC-010	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.10 lbs/hr and 0.44 tpy
AD-002	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.027 lbs/hr and 0.118 tpy
AD-003	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	1.07 lbs/hr and 4.69 tpy
AD-004	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.54 lbs/hr and 2.35 tpy
AD-005	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.12 lbs/hr and 0.51 tpy

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AD-006	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.46 lbs/hr and 2.01 tpy
AD-007	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.21 lbs/hr and 0.91 tpy
AD-008	Federally Enforceable Construction Permit issued on October 8, 1996, and modified on October 11, 2004	3.B.3	PM/PM ₁₀	0.27 lbs/hr and 1.18 tpy
AB-001 AC-001 AD-001 AE-001 AG-001	40 CFR 63.1310 National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins, 40 CFR 63, Subpart JJJ	3.B.12	НАР	Applicability
AB-001 AC-001 AD-001 AE-001	40 CFR 63.1316(b)(2)(v)(a), Subpart JJJ	3.B.13	НАР	Reduce emissions of total organic HAP in a combustion device by 98 weight-percent or to a concentration of 20 ppmv, whichever is less stringent.
	40 CFR 63.1331(a), Subpart JJJ	3.B.14	НАР	Comply with the equipment leak provisions of Subpart JJJ by complying with Subpart H with the noted differences.
	40 CFR 63.1331(a)(9)(iii), Subpart JJJ	3.B.15	НАР	Requirements for Pressure Relief Devices
AG-001	40 CFR 63.1330(b), Subpart JJJ	3.B.16	НАР	Comply with the wastewater provisions of Subpart JJJ by complying with §§ 63.132 through 63.149 of Subpart G, with the noted differences. Recordkeeping requirements only for Group 2 wastewater streams (See Condition 5.B.9).
AG-001	40 CFR 63.1330(c), `Subpart JJJ	3.B.17	НАР	Comply with the maintenance wastewater provisions of Subpart JJJ by complying with §§ 63.105 of Subpart F, with the noted differences.
AB-007 AC-007 AD-006	Title V Operating Permit issued XXXXX	3.B.18		Vents shall remain closed during normal operation.

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-004 AA-005 AA-006 AA-011 AA-012 AA-013	40 CFR 63.7485 National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD	3.B.19	НАР	Applicability Annual tune-up
	3(3), Subpart DDDDD	3. D .20	IIAI	Allitual tulie-up
	40 CFR 63.7500(a)(1) and Table 3(4), Subpart DDDDD	3.B.21	НАР	One-time energy assessment
	40 CFR 63.7500(a)(3), Subpart DDDDD	3.B.22	НАР	Operate in such a manner to minimize emissions using good air pollution control practices.

3.B.1 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, and AA-006, the maximum permissible emissions of ash and/or particulate matter from fossil fuel burning installations greater than 10 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.

3.B.2 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, AA-006, AA-007, AA-009, AA-010, AA-011, AA-012, AA-013, and AA-021, the maximum discharge of sulfur dioxides 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.

3.B.3 For Emission Points AA-001 through AA-006, AB-002 through AB-010, AC-002 through AC-010, and AD-002 through AD-008, the permittee shall be limited by the Federally Enforceable Construction Permit issued October 8, 1996, and modified October 11, 2004.

- (Ref.: Federally Enforceable Construction Permit issued October 8, 1996, and modified October 11, 2004)
- 3.B.4 For Emission Points AA-001, AA-002, and AA-003, the permittee shall use natural gas (primary fuel) or process vent streams from the Esterification (H1, H2, or L1) process and the Glycol Recovery Unit. Any process vent streams combusted in the boilers must be introduced simultaneously with the primary fuel. The total combined natural gas fuel usage for AA-001, AA-002, and AA-003 shall not exceed 1,450 MMcf/year.
 - (Ref.: Federally Enforceable Construction Permit issued October 8, 1996, and modified October 11, 2004)
- 3.B.5 For Emission Points AA-001 through AA-006, the permittee is subject to the New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Dc) and General Provisions (40 CFR 60, Subpart A).
 - (Ref.: 40 CFR 60.42c, Subpart Dc)
- 3.B.6 For Emission Points AA-004, AA-005, and AA-006, the permittee shall use natural gas (primary fuel) or process vent streams from the Esterification (H1, H2, or L1) process and the Glycol Recovery Unit. Any process vent streams combusted in the boilers must be introduced simultaneously with the primary fuel. The total combined natural gas fuel usage for AA-004, AA-005, and AA-006 shall not exceed 2,000 MMcf/year.
 - (Ref.: Federally Enforceable Construction Permit issued October 8, 1996, and modified October 11, 2004)
- 3.B.7 For Emission Points AA-007, AA-009, AA-010, AA-011, AA-012, AA-013, and AA-021, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3(D)(1)(a))
- 3.B.8 For Emission Point AA-007, fuel other than Diesel is prohibited. Diesel fuel usage shall not exceed 3,840 gallons per year.
 - (Ref.: Federally Enforceable Construction Permit issued October 8, 1996, and modified October 11, 2004)
- 3.B.9 For Emission Points AA-009 and AA-010, fuel other than Diesel is prohibited. Total combined Diesel fuel usage for AA-009 and AA-010 shall not exceed 2,496 gallons per

year.

(Ref.: Federally Enforceable Construction Permit issued October 8, 1996, and modified October 11, 2004)

- 3.B.10 For Emission Points AA-007, AA-009, AA-010, and AA-021, the permittee is subject to and shall comply with National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The permittee shall:
 - (a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and
 - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(Ref.: 40 CFR 63.6602 and Table 2c, Subpart ZZZZ)

3.B.11 For Emission Points AB-011, AC-011, AF-001, AF-002, AF-003, AF-004, AH-001, AH-002, AH-003, AH-004, AH-005, and AH-006, the permittee shall not cause, permit, or allow the emissions of particulate matter in total quantities in any one hour from any manufacturing process, which includes any associated stacks, vents, outlets, or combination thereof, to exceed the amount determined by the relationship

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

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

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

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

3.B.12 For Emission Points AB-001, AC-001, AD-001, AE-001, and AG-001, the permittee is subject to and shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins (40 CFR 63, Subpart JJJ) and the General Provisions for National Emission Standards for Hazardous Air Pollutants (NESHAP) Source Categories (40 CFR 63, Subpart A).

(Ref.: 40 CFR 63.1310, Subpart JJJ)

3.B.13 For Emission Points AB-001, AC-001, AD-001, and AE-001, the permittee using a continuous terephthalic acid process shall reduce the emissions in a combustion device to achieve 98 weight percent reduction or to achieve a concentration of 20 parts per million by volume (ppmv) on a dry basis, whichever is less stringent, If the permittee comply with the 20 ppmv standard, the concentration shall include a correction to 3 percent oxygen only when supplemental combustion air is used to combust the emissions.

(Ref.: 40 CFR 63.1316(b)(2)(v)(a), Subpart JJJ)

3.B.14 For Emission Points AB-001, AC-001, AD-001, and AE-001, the permittee shall comply with the Equipment Leak Provisions of the National Emission Standards for Hazardous Air Pollutants Emissions: Group IV Polymers and Resins, Subpart JJJ, 40 CFR 63.1331. More specifically, the permittee shall comply with the requirements of the National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks (40 CFR 63, Subpart H), with the differences noted in paragraphs 63.1331(a)(1) through (a)(13).

(Ref.: 40 CFR 63.1331(a), Subpart JJJ)

3.B.15 Beginning March 27, 2017, for Emission Points AB-001, AC-001, AD-001, and AE-001, except as specified in 40 CFR 63.1331(a)(9)(iv), the permittee shall comply with the operating and pressure release requirements specified in 40 CFR 63.1331(a)(9)(i) and (ii) for pressure relief devices in organic HAP gas or vapor service. Except as specified in 40 CFR 63.1331(a)(9)(iv), the permittee shall also comply with the pressure release management requirements specified in 40 CFR 63.1331(a)(9)(iii) for all pressure relief devices in organic HAP service.

(Ref.: 40 CFR 63.1331(a)(9), Subpart JJJ)

3.B.16 For Emission Point AG-001, the permittee shall comply with the Wastewater Provisions of the National Emission Standards for Hazardous Air Pollutants Emissions: Group IV Polymers and Resins, Subpart JJJ, 40 CFR 63.1330. More specifically, the permittee shall comply with the requirements of the National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (40 CFR 63, Subpart G) 40 CFR 63.132 through 63.149, with the differences noted in 40 CFR 63.1330(b)(1) through (b)(22).

(Ref.: 40 CFR 63.1330(b), Subpart JJJ)

3.B.17 For Emission Point AG-001, the permittee shall comply with the Wastewater Provisions of the National Emission Standards for Hazardous Air Pollutants Emissions: Group IV Polymers and Resins, Subpart JJJ, 40 CFR 63.1330. More specifically, the permittee shall

comply with the requirements of the National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry (40 CFR 63, Subpart F) for maintenance wastewater in 40 CFR 63.105, except that when 40 CFR 63.105(a) refers to "organic HAPs listed in Table 9 of Subpart G of 40 CFR 63 Subpart JJJ," the permittee is only required to consider compounds that meet the definition of organic HAP in 40 CFR 63.1312 and that are listed in Table 9 of 40 CFR part 63, Subpart G, except for ethylene glycol which need not be considered, for the purposes of 40 CFR 63, Subpart JJJ.

(Ref.: 40 CFR 63.1330(c), Subpart JJJ))

3.B.18 For Emission Points AB-007, AC-007, and AD-006, the vents shall remain closed during normal operation.

(Ref.: Title V Operating Permit issued XXXX)

3.B.19 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, the permittee is subject to and shall comply with all applicable requirements of National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (40 CFR 63, Subpart DDDDD) and the General Provisions (40 CFR 63, Subpart A).

(Ref. 40 CFR 63.7485, Subpart DDDDD)

3.B.20 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, the permittee shall meet each emission limit and work practice standard in 40 CFR 63, Subpart DDDDD Tables 1 through 3, and 11 through 13, that applies to the boiler or process heater.

The permittee shall conduct a tune-up of the boiler or process heater annually as specified in 40 CFR 63.7540.

(Ref.: 40 CFR 63.7500(a)(1) and Table 3(), Subpart DDDDD)

3.B.21 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, the permittee shall have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. A permittee that operated under an energy management program developed according to the ENERGY STAR guidelines for energy management or compatible with ISO 50001 for at least one year between January 1, 2008 and January 31, 2016, that includes the affected units also satisfies the energy assessment requirement. The

energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in 40 CFR 63.7575:

- (a) A visual inspection of the boiler or process heater system.
- (b) An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
- (c) An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
- (d) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage
- (e) A review of the facility's energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified.
- (f) A list of cost-effective energy conservation measures that are within the facility's control.
- (g) A list of the energy savings potential of the energy conservation measures identified.
- (h) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

(Ref.: 40 CFR 63.7500(a)(1) and Table 3(4), Subpart DDDDD)

3.B.22 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ that 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 63.7500(a)(3), Subpart DDDDD)

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

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.C.1	PM	0.6 lbs/MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO ₂	4.8 lbs/MMBTU
11 Miss. Admin. Code Pt. 2, R.1.3.F(1)	3.C.3	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.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)

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

3.C.3 The permittee shall not cause, permit, or allow the emissions of particulate matter in total quantities in any one hour from any manufacturing process, which includes any associated stacks, vents, outlets, or combination thereof, to exceed the amount determined by the relationship

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

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

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

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

D. Work Practice Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 AA-002 AA-003 AA-004 AA-005 AA-006 AB-001 AC-001 AD-001 AE-001	40 CFR 63.6(e)	3.D.1	Operations and Maintenance	The permittee shall operate and maintain equipment, including associated pollution control equipment and monitoring equipment, in a manner to minimize emissions.
	40 CFR 63.6(e)	3.D.2	Corrective Action	The permittee shall correct malfunctions as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan.
	40 CFR 63.1135(b)(1)	3.D.3	Startup, Shutdown, and Malfunction Plan	The permittee shall develop and implement a written startup, shutdown, and malfunction plan as specified in 40 CFR 63.6(e)(3).

3.D.1 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, AA-006, AB-001, AC-001, AD-001, and AE-001, the permittee shall at all times, including periods of startup, shutdown, and malfunction, shall operate and maintain each effected source, including associated pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the permittee reduce emissions to the greatest extent which is consistent with safety and good air pollution control practices.

(Ref.: 40 CFR 63.6(e)(1)(i))

3.D.2 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, AA-006, AB-001, AC-001, AD-001, and AE-001, the permittee shall correct malfunctions as soon as practicable after their occurrence with the startup, shutdown, and malfunction plan required in 40 CFR 63.6(e)(3).

(Ref.: 40 CFR 63.6(e)(1)(ii))

3.D.3 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, AA-006, AB-001, AC-001, AD-001, and AE-001, the permittee shall develop and implement a written startup, shutdown, and malfunction plan as specified in 40 CFR 63.6(e)(3). This plan shall describe in detail, procedures for operating and maintaining the affected source during periods of startup, shutdown, and malfunction and a program for corrective action for

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malfunctioning process and air pollution control equipment used to comply with 40 CFR 63, Subpart JJJ.

(Ref: 40 CFR 63.1335(b)(1) and 40 CFR 63.6(e))

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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(5)(a), (c), & (d).)

4.3 For Emission Points AB-001, AC-001, AD-001, and AE-001, the permittee shall comply with 40 CFR 63.1131(a)(9), Subpart JJJ by March 27, 2017.

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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(1).)
- 5.A.3 Except where a longer duration is specified in an applicable requirement, 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.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 11 Miss. Admin. Code Pt. 2, R. 6.2.E. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.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 and Recordkeeping Requirements

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AA-001 AA-002 AA-003 AA-004 AA-005 AA-006	Fuel Usage	Record and maintain the amount of fuel combusted during each day and in any 12-month rolling period.	5.B.1	40 CFR 60.48c(g), Subpart Dc and Federally Enforceable Construction Permit issued October 8, 1996, and modified October 11, 2004
AA-007 AA-009 AA-010 AA-011 AA-012 AA-013	Fuel Usage	Maintain records to document fuel usage on a daily basis and in any 12-month rolling period.	5.B.2	Federally Enforceable Construction Permit issued October 8, 1996, and modified October 11, 2004, and Title V Operating Permit issued XXXXX
AA-007 AA-009 AA-010 AA-021	Hours of Operation	Maintain and record to document hours of operation on a daily basis and any consecutive 12-month period.	5.B.3	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)
AB-001 AC-001 AD-001	НАР	Testing and Compliance Demonstration	5.B.4	40 CFR 63.1318(a) and 63.116(b)(2), Subpart JJJ
AD-001 AE-001 AG-001	НАР	Monitoring	5.B.5	40 CFR 63.1317 and 63.114(a)(3), Subpart JJJ
	НАР	Recordkeeping	5.B.6	40 CFR 63.1615(a), 63.1319 and 63.117, Subpart JJJ
AB-001 AC-001 AD-001 AE-001 AG-001	НАР	LDAR Program for Applicable Components	5.B.7	40 CFR 63.1331, Subpart JJJ

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AB-002 through AB-010 AC-002 through AC-010 AD-002 through AD-008 AF-001 through AF-004	Control Equipment Maintenance	Monitoring and Recordkeeping Requirements	5.B.8	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)
AB-002 through AB-010 AC-002 through AC-010 AD-002 through AD-008 AF-001 through AF-004 AH-001 through	Visible Emissions/Opacity	Weekly Monitoring and Recordkeeping of Visible Emissions	5.B.9	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)
AA-007	HAP	Maintenance	5.B.10	40 CFR 63.6625(e), Subpart ZZZZ
AA-009 AA-010 AA-021		Installation	5.B.11	40 CFR 63.6625(f), Subpart ZZZZ
7111021		Operation	5.B.12	40 CFR 63.6625(h), Subpart ZZZZ
		Continuous Compliance	5.B.13	40 CFR 63.6605, Subpart ZZZZ
			5.B.14	40 CFR 63.6640(f), Subpart ZZZZ
		Recordkeeping	5.B.15	40 CFR 63.6655, Subpart ZZZZ
AA-001 AA-002 AA-003 AA-004 AA-005 AA-006	NO _x and CO	Stack test in accordance with EPA Test Methods 7 and 10A.	5.B.16	11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(a)(2)

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AB-002 through AB-010 AC-002 through AC-010 AD-002 through AD-008	PM/PM ₁₀	Stack test in accordance with EPA Test Methods 1 – 5.	5.B.16	11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(a)(2)
AA-001 AA-002 AA-003 AA-004 AA-005 AA-006	NO _x and CO	Calculate and record the monthly NO _x and CO emissions.	5.B.17	11 Miss. Admin. Code Pt. 2, R.6.3.A(3)(a)(2)
AA-004 AA-005 AA-006	НАР	Demonstrate Compliance	5.B.18	40 CFR 63.7505(a), Subpart DDDDD
AA-000 AA-011 AA-012 AA-013		Tune-up Requirements	5.B.19	40 CFR 63.7515(d), Subpart DDDDD
		Demonstrate Compliance for Tune-up	5.B.20	40 CFR 63.7540(a)(10), Subpart DDDDD

5.B.1 For Emission Points AA-001 through AA-006, the permittee shall record and maintain records of the amount of natural gas combusted during each day and 12-month rolling basis.

(Ref.: 40 CFR 60.48c(g) and Federally Enforceable Permit to Construct issued October 8, 1996, and modified October 11, 2004)

5.B.2 For Emission Points AA-007, AA-009, AA-010, AA-011, AA-012, and AA-013, the permittee shall maintain sufficient records to document fuel usage on a daily basis and rolling 12-month basis.

(Ref.: Federally Enforceable Permit to Construct issued October 8, 1996, and modified October 11, 2004, and Title V Operating Permit issued XXXXX)

5.B.3 For Emission Points AA-009, AA-010, and AA-021, the permittee shall maintain sufficient records to document the hours of operation on a daily basis and any consecutive 12-month

period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3))

5.B.4 There are no continuous process vent testing or compliance demonstration requirements for Emission Points AB-001, AC-001, AD-001, AE-001, and AG-001, since the continuous process vents are vented directly into the flame zone with the primary fuel.

(Ref.: 40 CFR 63.1318(a) and 63.116(b)(2), Subpart JJJ)

5.B.5 There are no continuous process vent monitoring requirements for Emission Points AB-001, AC-001, AD-001, AE-001, and AG-001, since the gas stream from these continuous process vents are vented directly into the flame zone with the fuel.

(Ref.: 40 CFR 63.1317 and 63.114(a)(3), Subpart JJJ)

5.B.6 For Emission Points AB-001, AC-001, AD-001, AE-001, and AG-001, the facility shall maintain a description of the location at which the vent stream is introduced into the flame zone of the boiler or process heater.

(Ref.: 40 CFR 63.117, 63.1315(a), and 63.1319, Subpart JJJ)

5.B.7 For Emission Points AB-001, AC-001, AD-001, AE-001, and AG-001, the permittee shall comply with the recordkeeping requirements of §63.1331 by complying with §63.181, with the differences noted in §63.1331(a).

(Ref.: 40 CFR 63.1331, Subpart JJJ)

5.B.8 For Emission Points AB-002 through AB-010, AC-002 through AC-010, AD-002 through AD-008, and AF-001 through AF-004, the permittee shall perform regular inspections for any required maintenance each week or more often if necessary to maintain proper operation of the pollution control equipment.

The permittee shall also maintain on hand at all times sufficient equipment as is necessary to repair and/or replace the pollution control equipment.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3))

5.B.9 For Emission Points AB-002 through AB-010, AC-002 through AC-010, AD-002 through AD-008, AF-001 through AF-004, and AH-001 through AH-006, the permittee shall conduct weekly inspection for visible emissions (VE) (one-minute interval). The permittee shall maintain a log noting 1) whether any air emissions (except water vapor)

were visible from the emission point and 2) all emission points from which visible emissions occurred. If no VE are observed then no further observation are required.

For emission points with VE, the permittee shall record 1) the color of the emission, 2) whether the emissions was light or heavy, 3) the cause of the emission, and 4) any corrective action taken.

Upon observation of VE from any emission point, the frequency of observation for that emission point shall become daily until no VE is observed for three consecutive days. After three consecutive days of no VE, the inspection frequency may be reduced to weekly. If no VE are observed for three consecutive months of weekly observations, the frequency may be reduced to monthly. However, if VE are observed during a monthly inspection, the frequency of inspection shall revert to the daily then weekly schedule as specified above.

Upon detecting VE, the permittee shall immediately inspect the control device and take appropriate corrective action. Records of VE inspections and any corrective action taken shall be kept in log form and made available for review upon request.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3))

5.B.10 For Emission Points AA-007, AA-009, AA-010, and AA-021, the permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(Ref.: 40 CFR 63.6625(e), Subpart ZZZZ)

5.B.11 For Emission Points AA-007, AA-009, AA-010, and AA-021, the permittee shall install a non-resettable hour meter if one is not already installed.

(Ref.: 40 CFR 63.6625(f), Subpart ZZZZ)

5.B.12 For Emission Points AA-007, AA-009, AA-010, and AA-021, 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.

(Ref.: 40 CFR 63.6225(h), Subpart ZZZZ)

5.B.13 For Emission Points AA-007, AA-009, AA-010, and AA-021, the permittee shall be in compliance with the operating limitations at all times. The permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

(Ref.: 40 CFR 63.6605, Subpart ZZZZ)

- 5.B.14 For Emission Points AA-007, AA-009, AA-010, and AA-021, the permittee shall operate the emergency stationary RICE according to the requirements below. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited. If the permittee does not operate the engine according the requirements below, the engine will not be considered an emergency engine and will need to meet all requirements for non-emergency engines.
 - (a) There is no time limit on the use of emergency stationary RICE in emergency situations.
 - (b) The permittee may operate the emergency stationary RICE for the purpose of maintenance checks and rediness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and rediness testing of such units is limited to 100 hours per year. The permittee may petition the MDEQ for approval of additional hours for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicated that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours a year.
 - (c) The permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that permittees may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is

no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.

(Ref.: 40 CFR 63.6640(f), Subpart ZZZZ)

- 5.B.15 For Emission Points AA-007, AA-009, AA-010, and AA-021, the permittee shall keep the following records:
 - (a) A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).
 - (b) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
 - (c) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
 - (d) Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - (e) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The permittee shall keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

The permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

The permittee shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

(Ref.: 40 CFR 63.6655(a), (d), (e), and (f), Subpart ZZZZ)

5.B.16 For Emission Points AA-001, AA-002, and AA-003, the permittee shall demonstrate compliance with the NO_x and CO emission limits set forth in Section 3.B of this permit by stack testing one of the three heaters in accordance with EPA Test Methods 7 and 10A, or other EPA approved test methods.

For Emission Points AA-004, AA-005, and AA-006, the permittee shall demonstrate compliance with the NO_x and CO emission limits set forth in Section 3.B of this permit by stack testing one of the three boilers in accordance with EPA Test Methods 7 and 10A, or other EPA approved test methods.

For Emission Points AB-002 through AB-010 and AC-002 through AC-010, the permittee shall demonstrate compliance with the PM emission limits set forth in Section 3.B of this permit by stack testing one of the two polymerization lines in accordance with EPA Test Methods 1 through 5, or other EPA approved test methods.

For Emission Points AD-002 through AD-008, the permittee shall demonstrate compliance with the PM emission limits set forth in Section 3.B of this permit by stack testing in accordance with EPA Test Methods 1 through 5, or other EPA approved test methods.

All test methods shall be those versions which are in effect upon permit issuance. The stack testing shall be performed with the emission units are operating as close to their maximum capacity as operating conditions allow. For purposes of demonstrating compliance with the opacity limit, the permittee shall conduct opacity observations concurrently with the performance tests.

All stack tests shall be completed and the subsequent stack test report submitted 180 days prior to permit expiration.

The permittee shall submit a test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the DEQ. If the initial stack test protocol is acceptable, subsequent test protocols may be waived if these protocols contain no significant changes. Also, the DEQ must be notified at least ten (10) days prior to the scheduled test date so that an observer may be scheduled to witness the test(s).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2))

5.B.17 For Emission Points AA-001 through AA-006, the permittee shall calculated and record the emissions in tons of NO_x and CO from each heater and boiler monthly. The emissions

shall be calculated using the monthly fuel usage for each heater and boiler and the results of the most recent stack test (as expressed in lb/MMBtu, lb/dscf, etc.). If there are no stack test results available, the permittee shall use the manufacturer's guarantee. The monthly emissions shall be used to demonstrate compliance with the combined tons/year emission limits in Section 3.B for each consecutive 12-month period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2))

5.B.18 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, the permittee shall be in compliance with the work practice standards at all times when unit is operating.

(Ref.: 40 CFR 63.7505(a), Subpart DDDDD)

5.B.19 or Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, the permittee shall conduct an annual, biennial, or 5-year performance tune-up according to 40 CFR 63.7540(a)(10). Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up.

(Ref.: 40 CFR 63.7515(d), Subpart DDDDD)

- 5.B.20 or Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, the permittee shall conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in 40 CFR 63.7540(a)(10)(i) through (vi). The permittee shall conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up..
 - (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
 - (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
 - (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until

- the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;
- (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;
- (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- (vi) Maintain on-site and submit, if requested by the Administrator, a report containing the following information:
 - (A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - (B) A description of any corrective actions taken as a part of the tune-up; and
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

(Ref.: 40 CFR 63.7540(a)(10), Subpart DDDDD)

C. Specific Reporting Requirements

Emission Point(s)	Pollutant/Parameter Monitored	Reporting Requirement	Condition Number	Applicable Requirement
AA-001 Fuel through AA-007 AA-009 AA-010 AA-011 AA-012 AA-013	Semiannual Reports of Fuel Usage	5.C.1	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)	
		Semi-Annual Reports of Fuel Types and Quantity	5.C.2	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)

Emission Point(s)	Pollutant/Parameter Monitored	Reporting Requirement	Condition Number	Applicable Requirement
AB-001 AC-001 AD-001 AE-001	НАР	Semi-Annual Periodic Reports	5.C.3	40 CFR 63.1335(e)(6), Subpart, Subpart JJJ
AA-001 AA-002 AA-003 AA-004 AA-005 AA-006	NO _x and CO	Submit a stack test report within 60 days of conducting the stack test.	5.C.4	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1)
AB-002 through AB-010 AC-002 through AC-010 AD-002 through AD-008	PM/PM ₁₀			
AA-001 AA-002 AA-003 AA-004 AA-005 AA-006	NO_x and CO	Semiannual Emissions Reports	5.C.5	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1)
AA-004 AA-005 AA-006	НАР	Notification of Compliance Status Report	5.C.6	40 CFR 63.7530(e), Subpart DDDDD
AA-000 AA-011 AA-012 AA-013		General Notifications	5.C.7	40 CFR 63.7545(a), Subpart DDDDD
121010		Other Fuel Notification	5.C.8	40 CFR 63.7545(f), Subpart DDDDD
		Change Notification	5.C.9	40 CFR 63.7545(h), Subpart DDDDD
		Reporting	5.C.10	40 CFR 63.7550(a), Subpart DDDDD
		Compliance Report	5.C.11	40 CFR 63.7550(b), Subpart DDDDD
			5.C.12	40 CFR 63.7550(c), Subpart DDDDD

Emission Point(s)	Pollutant/Parameter Monitored	Reporting Requirement	Condition Number	Applicable Requirement
			5.C.13	40 CFR 63.7550(d), Subpart DDDDD

5.C.1 For Emission Points AA-001 through AA-007, AA-009, AA-010, AA-011, AA-012, and AA-013, the permittee shall submit semiannual reports in accordance with Condition 5.A.4 providing the fuel usage for each consecutive 12-month period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3))

5.C.2 For Emission Points AA-001 through AA-007, AA-009, AA-010, AA-011, AA-012, AA-013, the permittee shall submit a written report in accordance with Condition 5.A.4 summarizing the type and quantity of fuel(s) combusted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3))

- 5.C.3 For Emission Points AB-001, AC-001, AD-001, and AE-001, the permittee shall submit the following periodic reports semiannually no later than 60 days after the end of each six month period which contains all applicable information in §63.1335(e)(6) including:
 - (a) A description of the location at which the vent stream is introduced into the flame zone of the boiler or process heater.
 - (b) The reporting requirements outlined in §63.182(d), with the differences noted in §63.1131(a)(5).
 - (c) All information specified in §63.1335(b)(1) regarding start-up, shutdown, and malfunctions.

(Ref.: 40 CFR 63.1335(e)(6), Subpart JJJ)

5.C.4 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, AA-006, AB-002 through AB-010, AC-002 through AC-010, and AD-002 through AD-008, the permittee shall submit a report of any stack test results within sixty (60) days of conducting the respective stack test.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1))

5.C.5 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, and AA-006, the

permittee shall submit a report of the monthly NO_x and CO emissions in tons from each emission point and the total NO_x and CO emissions for each consecutive 12-month period, in tons/year. The report shall show the combined NO_x and CO emissions from AA-001 through AA-003 and AA-004 through AA-006, in tons/year, for each consecutive 12-month period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1))

5.C.6 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, the permittee shall include with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to 40 CFR 63, Subpart DDDDD, Table 3, and that the assessment is an accurate depiction of your facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.

(Ref.: 40 CFR 63.7530(e), Subpart DDDDD)

5.C.7 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, the permittee shall submit to MDEQ all the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified.

(Ref.: 40 CFR 63.7545(a), Subpart DDDDD)

5.C.8 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, if the permittee operates a unit designed to burn natural gas, refinery gas, or other gas 1 fuels that is subject to this subpart, and intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of this part, part 60, 61, or 65, or other gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee shall submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information specified in 40 CFR 63.7545(f)(1) through (5).

(Ref.: 40 CFR 63.7545(f), Subpart DDDDD)

- 5.C.9 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, if the permittee has switched fuels or made a physical change to the boiler or process heater and the fuel switch or physical change resulted in the applicability of a different subcategory, the permittee shall provide notice of the date upon which you switched fuels or made the physical change within 30 days of the switch/change. The notification must identify:
 - (1) The name of the owner or operator of the affected source, as defined in 40CFR 63.7490, the location of the source, the boiler(s) and process heater(s) that have

- switched fuels, were physically changed, and the date of the notice.
- (2) The currently applicable subcategory under this subpart.
- (3) The date upon which the fuel switch or physical change occurred.

(Ref.: 40 CFR 63.7545(h), Subpart DDDDD)

5.C.10 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, the permittee shall submit each report in 40 CFR 63, Subpart DDDDD, Table 9 that applies.

(Ref.: 40 CFR 63.7550(a), Subpart DDDDD)

5.C.11 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, the permitee shall submit submit an annual, biennial, or 5-year compliance report, as applicable, as specified in 40 CFR 63.7750(b)(1) through (4), instead of a semi-annual compliance report.

(Ref.: 40 CFR 63.7750(b), Subpart DDDDD)

5.C.12 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, a compliance report shall contain the information in 40 CFR 63.7550(c) depending on the choice made to comply with the limits of Subpart DDDDD.

(Ref.: 40 CFR 63.7750(c), Subpart DDDDD)

5.C.13 For Emission Points AA-004, AA-005, AA-006, AA-011, AA-012, and AA-013, for each deviation from the work practice standards for periods of startup and shutdown, the compliance report must additionally contain the information required in 40 CFR 63.7750(d)(1) through (3).

(Ref.: 40 CFR 63.7550(d), Subpart DDDDD)

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

11 Miss. Admin. Code Pt. 2, Ch. 1. Air Emission Regulations for the Prevention, Abatement, and Control

of Air Contaminants

11 Miss. Admin. Code Pt. 2, Ch. 2. Permit Regulations for the Construction and/or Operation of Air

Emissions Equipment

11 Miss. Admin. Code Pt. 2, Ch. 3. Regulations for the Prevention of Air Pollution Emergency Episodes

11 Miss. Admin. Code Pt. 2, Ch. 4. Ambient Air Quality Standards

11 Miss. Admin. Code Pt. 2, Ch. 5. Regulations for the Prevention of Significant Deterioration of Air

Quality

11 Miss. Admin. Code Pt. 2, Ch. 6. Air Emissions Operating Permit Regulations for the Purposes of Title

V of the Federal Clean Air Act

11 Miss. Admin. Code Pt. 2, Ch. 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

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

PM₁₀ Particulate Matter less than 10 µm in diameter

ppm Parts per Million

PSD Prevention of Significant Deterioration, 40 CFR 52

SIP State Implementation Plan

SO₂ Sulfur Dioxide TPY Tons per Year TRS Total Reduced Sulfur

VEE Visible Emissions Evaluation
VHAP Volatile Hazardous Air Pollutant
VOC Volatile Organic Compound