

STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Express Grain Terminals LLC
2015 West River Road
Greenwood, Mississippi
Leflore County

Biodiesel Operation

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued:_____

Permit No.: 1560-00050

Modified:_____

Draft/Proposed

SECTION 1

A. GENERAL CONDITIONS

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

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

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

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

3. The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law.

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

4. It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits.

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

5. The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities.

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

6. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state.

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

7. The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

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

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

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

9. The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

10. Design and Construction Requirements: The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries.

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

11. Solids Removal: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits.

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

12. Diversion and Bypass of Air Pollution Controls: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in 11 Miss. Admin. Code Pt. 2, R. 1.10., "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants."

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

13. Fugitive Dust Emissions from Construction Activities: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum.

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

14. Right of Entry: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:

- a) To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and
- b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emissions.

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

15. Permit Modification or Revocation: After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:

- a) Persistent violation of any of the terms or conditions of this permit;
- b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c) A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

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

16. Public Record and Confidential Information: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality, Office of Pollution Control.

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

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

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

18. Severability: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.

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

19. Permit Expiration: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(1).)

20. Certification of Construction: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(3).)

21. Beginning Operation: Except as prohibited in Section 1, Condition 24 of this permit, after certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by 11 Miss. Admin. Code Pt. 2, R. 2.13.G.

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

22. Application for a Permit to Operate: Except as otherwise specified in Section 1, Condition 24 of this permit, the application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).)

23. Operating Under a Permit to Construct: Except as otherwise specified in Section 1, Condition 24 of this permit, upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).)

24. Application Requirements for a Permit to Operate for Moderate Modifications: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to “net” out of PSD/NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7).)

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

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

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

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

27. Compliance Testing: Regarding compliance testing:

- a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.
- b) Compliance testing will be performed at the expense of the permittee.
- c) Each emission sampling and analysis report shall include but not be limited to the following:
 - (1) detailed description of testing procedures;
 - (2) sample calculation(s);
 - (3) results; and
 - (4) comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

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

B. GENERAL NOTIFICATION REQUIREMENTS

1. Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun.

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

2. The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).)

3. Upon the completion of construction or installation of an approved stationary source or modification, and prior to commencing operation, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board.

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

4. The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with “as built” plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an “as built” application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law.

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

SECTION 2 EMISSION POINT DESCRIPTION

The permittee is authorized to construct and operate, upon certification of construction, air emissions equipment, as described in the following table.

Emission Point	Reference Number	Description
AO-001	E-14	15,438 gallon Methanol Tank Storage Tank Group 1 Process Vent
AO-002	E-15	15,438 gallons Methanol Tank Storage Tank Group 1 Process Vent
AO-003	E-16	13,860 gallons Sodium Methylate Storage Tank (Containing up to 30% methanol) Group 1 Process Vent
AO-004	E-17	18,949 gallons Glycerin Storage Tank (containing up to 20% methanol) Group 1 Process Vent
AO-005	E-19	Biodiesel Truck Loading
AO-006	E-20	Glycerin Truck Loading Group 1 Process Vent
AO-007	E-21	Winterization Filter
AO-008	F-01	Fugitive Emissions – Biodiesel Operation Equipment Leaks
AO-009	VR0301	Primary Reactor Group 1 Process Vent
AO-010	VR0401	Secondary Reactor Group 1 Process Vent
AO-011	SE0301	Primary Decanter Group 1 Process Vent
AO-012	SE0401	Secondary Decanter Group 1 Process Vent
AO-013	TL0302	Sodium Methylate Tank Group 1 Process Vent
AO-014	TL0303	Methanol Intermediate Tank Group 1 Process Vent
AO-015	TK0304	Break Tank Group 1 Process Vent
AO-016	TK0401	Methanol Recovery Unit Feed

Emission Point	Reference Number	Description
AO-017	E-30	Methanol Recovery Unit Emissions
AO-018	----	Wet Scrubber Control Device Control device for process vents and storage tanks.
AO-036	E-32	Methanol Distillation Process
AO-037	E-33	Glycerin Distillation Process
AO-038	E-34	5 MMBtu/hr Natural Gas-fired Hot Oil Heater
AO-039	E-35a	30,000 gallon Dry Methanol Storage Tank No. 1 15.0 kPa < Maximum True Vapor Pressure < 27.6 kPa Group 1 Tank
AO-040	E-35b	30,000 gallon Dry Methanol Storage Tank No. 2 15.0 kPa < Maximum True Vapor Pressure < 27.6 kPa Group 1 Tank
AO-041	E-36a	30,000 gallon Wet Methanol Storage Tank No. 1 15.0 kPa < Maximum True Vapor Pressure < 27.6 kPa Group 1 Tank
AO-042	E-36b	30,000 gallon Wet Methanol Storage Tank No. 2 15.0 kPa < Maximum True Vapor Pressure < 27.6 kPa Group 1 Tank
AO-043	E-37	30, 000 gallon Crude Glycerol Storage Tank No. 2 0.69 kPa < Maximum True Vapor Pressure < 15.0 kPa Group 1 Tank
AO-044	E-38	30, 000 gallon Crude Glycerol Storage Tank No. 3 0.69 kPa < Maximum True Vapor Pressure < 15.0 kPa Group 1 Tank
AO-045	E-39	30,000 gallon Crude Glycerol Acidification Mix Tank 0.69 kPa < Maximum True Vapor Pressure < 15.0 kPa Group 1 Tank
AO-046	E-40a	30,000 gallon Refined USP Glycerol Storage Tank No. 1 Maximum True Vapor Pressure < 0.69 kPa Group 2 Tank
AO-047	E-40b	30,000 gallon Refined USP Glycerol Storage Tank No. 2 Maximum True Vapor Pressure < 0.69 kPa Group 2 Tank
AO-048	E-41	30,000 gallon Refined Tech. Glycerol Storage Tank No. 1 Maximum True Vapor Pressure < 0.69 kPa Group 2 Tank
AO-049	E-42	30,000 gallon Free Fatty Acid Storage Tank Maximum True Vapor Pressure < 0.69 kPa Group 2 Tank

Emission Point	Reference Number	Description
AO-050	E-43	30,000 gallon Glycerol Decant Tank No. 1 Maximum True Vapor Pressure < 0.69 kPa Group 2 Tank
AO-051	E-44	Glycerol Stripper/Dryer Vacuum Pump to Vent to Scrubber
AO-052	E-45	Dry Methanol Truck Loading Group 1 Transfer Rack Controlled By Vapor Balancing System
AO-053	E-46	Wet Methanol Truck Loading Group 1 Transfer Rack Controlled By Vapor Balancing System
AO-054	E-47	Refined Glycerol Truck Loading Group 2 Loading Rack
AO-055	E-48	Free Fatty Acid Truck Loading Group 2 Loading Rack
AO-056	E-49	Methanol Distillation Process Vent to Scrubber
AO-057	E-50	Glycerol Purification Process Primary Vent
AO-058	E-51	Glycerol Purification Process Secondary Vent

Insignificant Activities		
<i>The following tanks are included for completeness but all have emissions less than 1 lb/hr of any regulated air pollutant and less than 0.1 lb/hr of any hazardous air pollutant and none are subject to an NSPS or MACT standard. Therefore, the following tanks are all insignificant activities and have no specific permit requirements.</i>		
Emission Point	Emission Point	Emission Point
AO-019	E-1	Feed Tank #1
AO-020	E-2	Feed Tank #2
AO-021	E-3	Feed Tank #3
AO-022	E-4	Feed Tank #4
AO-023	E-6	Biodiesel Tank #1
AO-024	E-7	Biodiesel Tank #2
AO-025	E-8	Biodiesel Tank #3
AO-026	E-9	Biodiesel Tank #4
AO-027	E-10	Biodiesel Tank #
AO-028	E-11	Biodiesel Tank #6
AO-029	E-12	Biodiesel Tank #7
AO-030	E-13	Biodiesel Tank #8
AO-031	E-17	27,720 gallon Wastewater Holding Tank
AO-032	IA1	Sulfuric Acid Tank
AO-033	IA2	Cooling Tower
AO-034	IA3	Phosphoric Acid Tank
AO-035	----	Insignificant Activities Emissions – Biodiesel Operation

SECTION 3 EMISSION LIMITATIONS AND STANDARDS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 1.3. A.	3.1	Smoke	Opacity shall not exceed 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3. B.	3.2		
	11 Miss. Admin. Code Pt. 2, R. 1.3.F(1).	3.3	PM (Filterable Only)	Emissions shall not exceed $E = 4.1 p^{0.67}$
	40 CFR 60, Subpart VVa (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006) 40 CFR 60.480a	3.4	VOCs	General Applicability
	40 CFR 60, Subpart FFFF (National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing) 40 CFR 63.2435(a)	3.5	HAPs	General Applicability
	40 CFR 63.2445(a)(2), Subpart FFFF	3.6	HAPs	Comply with standard upon startup.
	40 CFR 63.2450(a), Subpart FFFF	3.7	HAPs	Comply with standard at all times.
	40 CFR 60, Subpart RRR (Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes) 40 CFR 60.700 40 CFR 63.2535(h), Subpart FFFF	3.8	VOCs HAPs	General Applicability Alternative means of compliance.
AO-001 AO-002 AO-003 AO-004 AO-006 AO-009 AO-010 AO-011 AO-012 AO-013 AO-014 AO-015 AO-016	40 CFR 63.2455(a), Table 1 to Subpart FFFF of Part 63, Subpart FFFF	3.9	HAPs	Reduce total organic HAP by ≥ 98 percent to an outlet concentration of ≤ 20 ppmv, or use recovery device to maintain TRE > 5.0.

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AO-018 AO-036 AO-037	40 CFR 60, Subpart NNN (Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations) 40 CFR 60.660(a), (b)(2), (c)(4)	3.10	VOC	General Applicability
AO-036 AO-037	40 CFR 60.662(a), (c), Subpart NNN	3.11	VOCs	Reduce TOC Emissions
				Maintain a TRE Index Greater than 1.0 without a control device.
AO-038	11 Miss. Admin. Code Pt. 2, R.1.3.D(1)(a).	3.12	PM (Filterable Only)	Emissions shall not exceed 0.6 lb/MMBtu
	40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) 40 CFR 63.7485	3.13	HAPs	General Applicability
AO-039 AO-040 AO-041 AO-042	40 CFR 60, Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984) 40 CFR 60.110b(a)	3.14	VOCs	General Applicability
AO-039 AO-040 AO-041 AO-042 AO-043 AO-044 AO-045	40 CFR 63.2470(a), Item 1 of Table 4, Subpart FFFF	3.15	HAPs	Reduce Total HAP Requirement

- 3.1. For the entire facility, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds 40 percent opacity subject to the exceptions provided in (a) and (b).
- a) Startup operations may produce emissions which exceed 40 percent opacity for up to 15 minutes per startup in any one hour and not to exceed three startups per stack in any 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-hour period does not exceed ten minutes per billion BTU gross heating value of fuel in any one hour.

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

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

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

- 3.3. For the entire facility, the permittee shall not allow the emission of particulate matter in total quantities in any one hour from any manufacturing process, which includes any associated stacks, vents, outlets or combination thereof, to exceed the amount determined by the relationship

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

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

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

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

- 3.4. For the entire facility, the biodiesel facility produces glycerol and methanol as final products, which are listed in 40 CFR 60.489. Accordingly, the facility meets the criteria of a new affected facility in the synthetic organic chemical manufacturing industry and therefore is subject to and shall comply with all applicable requirements of the Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 (40 CFR 60, Subpart VVa) and the General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.480a, Subpart VVa)

- 3.5. For the entire facility, the biodiesel facility uses methanol and produces glycerol, which are listed HAPs. The facility is a continuous process and operates under SIC code 2869. Accordingly, the facility meets criteria of a miscellaneous organic chemical manufacturing processing unit (MCPU) and is therefore subject to and shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (40 CFR 63, Subpart FFFF) and the General Provisions (40 CFR 63, Subpart A).

(Ref.: 40 CFR 63.2435(a), Subpart FFFF)

- 3.6. For the entire facility, the permittee shall comply with the requirements of 40 CFR 63, Subpart FFFF upon startup of the facility as defined in 40 CFR 63.2250.

(Ref.: 40 CFR 63.2445(a)(2), Subpart FFFF)

- 3.7. For the entire facility, the permittee shall demonstrate compliance with the emission limits and work practice standards in Tables 1 through 7 of 40 CFR 63, Subpart FFFF at all times, except during periods of startup, shutdown, and malfunction (SSM), and the facility shall meet the requirements in 63.2455 through 63.2490 (or the alternative means of compliance with 63.2495, 63.2500, or 63.2505), except as specified in 63.2450(b) through 63.2450(s). The permittee shall meet the notification, reporting, and recordkeeping requirements specified in 63.2515, 63.2520, and 63.2525.

(Ref.: 40 CFR 63.2450(a), Subpart FFFF)

- 3.8. For Emission Points AO-009 and AA-010, the reactors produce glycerol as a final product, which is listed in 60.707. Accordingly, these two reactors are, subject to and shall comply with all applicable requirements of the Standards of Performance for Volatile Organic Compound Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes (40 CFR 60, Subpart RRR) and General Provisions (40 CFR 60, Subpart A). In accordance with the provisions of 40 CFR 63.2565(h), the permittee will comply with all applicable requirements of 40 CFR 63, Subpart FFFF, satisfy the requirements of 40 CFR 60, Subpart RRR.

(Ref.: 40 CFR 60.700, Subpart RRR; 40 CFR 63.2535(h), Subpart FFFF)

- 3.9. For Emission Points AO-009 through AO-016, the emission points have been designated as Group 1 continuous process vents for compliance with 40 CFR 63, Subpart FFFF. Vents from the Group 1 Storage Tanks (AO-001, AO-002, AO-003, AO-004, AO-039, AO-040, AO-041, and AO-042) and the Glycerin Tank Truck Loading Rack (AO-006) will also be collected in the same closed vent system with the process vents. Accordingly, for the above listed sources, the permittee shall reduce emissions of total organic HAP emissions by ≥ 98 percent by weight, or to an outlet process concentration ≤ 20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control device (except a flare); or use a recovery device to maintain the total resource effectiveness (TRE) above 5.0.

(Ref.: 40 CFR 63.2455(a), Table 1 to Subpart FFFF, Subpart FFFF)

- 3.10. For Emission Points AO-018, AO-036, and AO-037, the emission points are part of a process unit that produce glycerol (CAS No. 56-81-5) and methanol (CAS No. 67-56-1) that commenced construction after December 30, 1983, and the affected facility has a total resource effectiveness (TRE) index value greater than 8.0. Therefore the facility is subject to and shall comply with all applicable requirements of the Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations (40 CFR 60, Subpart NNN) and General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.660(a), (b)(2), (c)(4); Subpart NNN)

3.11. For Emission Points AO-035 and AA-036, the permittee shall comply with either (a) or (b) of this condition for each vent stream on and after the date on which the initial performance test required by 60.8 and Condition 5.1 is completed, but not later than 60 days after achieving after achieving the maximum production rate at which the affected facility will be operated, or 180 days after the initial start-up, whichever date comes first. The permittee shall comply with either:

- a) Reduce emissions of total organic carbon (TOC, less methane and ethane) by 98 weight-percent, or to a TOC (less methane and ethane) concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen, whichever is less stringent; or
- b) Maintain a TRE index value greater than 1.0 without use of VOC emission control devices.

(Ref.: 40 CFR 60.662(a), (c), Subpart NNN)

3.12. For Emission Point AO-038, the maximum permissible emission of ash and/or particulate matter for fossil fuel burning installations of less than 10 MMBTU 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)(b).)

- 3.13. For Emission Point AO-038, 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).

“Emission Point AO-038 is a new process heater located at a major source of HAP emission in the “gas 1” subcategory.”

(Ref.: 40 CFR 63.7485, 63.7490(a), (b), Subpart DDDDD)

- 3.14. For Emission Point AO-039, AO-040, AO-041, and AO-042, the permittee is subject to and shall comply with all applicable requirements of the Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (40 CFR 60, Subpart Kb) and General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.110b, Subpart Kb)

- 3.15. For Emission Points AO-039, AO-040, AO-041, AO-042, AO-043, AO-044, and AO-045, the permittee shall determine which of the following emission standards to comply with:

- a) Reduce total HAP emissions by ≥ 95 percent by weight or to ≤ 20 ppmv of TOC or organic HAP and ≤ 20 ppmv of hydrogen halide and halogen HAP by venting emissions through a closed vent system to any combination of control devices (excluding a flare); or
- b) Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare; or
- c) Reduce total HAP emissions by venting emissions to a fuel gas system or process in accordance with §63.982(d) and the requirements referenced therein.

The permittee shall submit the determination and a compliance plan with the Certification of Construction to the Office of Pollution Control.

(Ref.: 40 CFR 63.2470(a), Item 1(a) of Table 4, Subpart FFFF)

**SECTION 4
WORK PRACTICES**

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Work Practice
AO-038	40 CFR 63.7500(e), 63.7540(a)(12), Subpart DDDDD	4.1	HAPs	Tune-up every 5 years.

- 4.1. For Emission Point AO-038, the permittee shall complete an initial five year tune-up within 61 months of startup of Emission Point AO-038 in accordance with (a) through (e) below. Subsequent tune-ups shall be performed within 61 months of the previous tune-up. The permittee may delay the burner inspection specified in (a) until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months.
- a) The permittee shall inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). 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;
 - b) 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;
 - c) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available;
 - d) 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
 - e) Maintain on-site and submit, a report containing the following information:

- 1) 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;
- 2) A description of any corrective actions taken as a part of the tune-up; and
- 3) The amount of fuel used over the 12 months prior to the tune-up.

If Emission Point AO-038 is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

(Ref.: 40 CFR 63.7500(e), 63.7515(d), 7540(a)(10)(i), (ii), (iv) through (vi), (12), (13), Subpart DDDDD)

SECTION 5 MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
Facility-Wide	40 CFR 60.485a, 60.486a, Subpart VVa	5.1	VOCs	Monitoring and Recordkeeping Applicability
	40 CFR 63.2525, 63.2535, Subpart FFFF	5.2	HAPs	Monitoring and Recordkeeping Applicability
AO-035 AO-036	40 CFR 60.665(h), Subpart NNN	5.3	VOCs	Recordkeeping Requirement
AO-038	40 CFR 63.7540(a)(12), Subpart DDDDD	5.4	HAPs	Recordkeeping Requirement
	40 CFR 63.7555(a)(1), 63.7560, Subpart DDDDD	5.5		Keep records for 5 years.
AO-039 AO-040 AO-041 AO-042	40 CFR 60.116b(a), (b), (c), (d), Subpart Kb	5.6	VOCs	Recordkeeping Requirement

- 5.1. For the entire facility, the permittee is subject to and shall comply with all applicable monitoring and recordkeeping requirements of the Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 (40 CFR 60, Subpart VVa) and the General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.485a, 60.486a, Subpart VVa)

- 5.2. For the entire facility, the permittee is subject to and shall comply with all applicable monitoring and recordkeeping requirements of the National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing (40 CFR 63, Subpart FFFF) and the General Provisions (40 CFR 63, Subpart A).

(Ref.: 40 CFR 63.2525, 63.2535, Subpart FFFF)

- 5.3. For Emission Points AO-035 and AO-036, the permittee shall demonstrate compliance with Condition 3.11 by keeping up-to-date, readily accessible records of:

- a) Any changes in production capacity, feedstock type, or catalyst type, or of any replacement, removal or addition of recovery equipment or a distillation unit;
- b) Any recalculation of the TRE index value performed pursuant to 60.664(g); and

- c) The results of any performance test performed pursuant to the methods and procedures required by 60.664(e).

(Ref.: 40 CFR 60.665(h), Subpart NNN)

- 5.4. For Emission Point AO-038, the permittee shall demonstrate continuous compliance with Condition 4.1 by conducting a tune-up every five years, not to exceed 61 months from the previous tune-up.

(Ref.: 40 CFR 63.7540(a)(12), Subpart DDDDD)

- 5.5. For Emission Point AO-038, the permittee shall keep a copy of each notification and report submitted to comply with Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status, according to the requirements in 63.10(b)(2)(xiv).

The permittee shall keep records in a form suitable and readily available for expeditious review, according to 63.10(b)(1). The records shall be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee shall keep each record on site, or the record must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years.

(Ref.: 40 CFR 63.7555(a)(1), 63.7560, Subpart DDDDD)

- 5.6. For Emission Points AO-039, AO-040, AO-041, and AO-042, the permittee shall keep records of the dimensions of the storage vessels and an analysis showing the capacity of the storage vessels for the life of the storage vessels. The permittee shall maintain records of the volume stored, the period of storage, and the maximum true vapor pressure of that volume during the respective storage period for at least two (2) years.

(Ref.: 40 CFR 60.116b(a), (b), (c), Subpart Kb)

SECTION 6 REPORTING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 2.2. B(11).	6.1	Submit detailed report of applicable requirements of 40 CFR 60, Subpart VVa and 40 CFR 63, Subpart FFFF.
	40 CFR 60.487a, Subpart VVa	6.2	Submit Semiannual Compliance Report
	40 CFR 63.2520(b)(1), (b)(2), (e), Subpart FFFF	6.3	Submit Semiannual Compliance Report
	40 CFR 63.2520(d), Subpart FFFF	6.4	Submit Notification of Compliance Status Report
AA-018 AO-035 AO-036	40 CFR 60.665(l), Subpart NNN	6.5	Submit Semiannual Compliance Report
AO-038	40 CFR 63.7545(a), (b), (e)(1), (8)(i), 63.7495(a), Subpart DDDDD	6.6	Submit Notification of Compliance Status Report
	40 CFR 63.7550(b), (b)(1), 63.7495(a), 63.7550(c)(1), (c)(5)(i) through (iv), (xiv), (xvii), Subpart DDDDD	6.7	Submit 5-year Tune-Up Compliance Report
AA-039 AO-040 AO-041 AO-042	40 CFR 60.116b(d), Subpart Kb	6.8	Notification Requirement

- 6.1. For the entire facility, the permittee shall develop and submit a detailed report of all applicable requirements of 40 CFR 60, Subpart VVa and 40 CFR 63, Subpart FFFF, including limitations, notifications, work practices, monitoring, testing, reporting and recordkeeping with the certification of construction for each emission point subject to each Subpart

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

- 6.2. For the entire facility, unless otherwise provided for in 40 CFR 60, Subpart VVa, the permittee shall submit semiannual reports containing the information specified in 60.487a beginning six (6) months after the initial startup date.

(Ref.: 40 CFR 60.487a, Subpart VVa)

- 6.3. For the entire facility, the permittee shall submit semiannual compliance reports containing the information specified in 63.2520(e) according to the schedule outlined in the following:
- a) The first compliance report must cover the period beginning on the compliance date that is specified for the facility in 63.2445 and ending on June 30th or December 31st, whichever date is the first date following the end of the first 6 months after the compliance date that is specified for the facility in 63.2445;
 - b) The first compliance report must be postmarked or delivered no later than August 31st or February 28th, whichever date is the first date following the end of the first reporting period.

(Ref.: 40 CFR 63.2520(b)(1), (2), (e), Subpart FFFF)

- 6.4. For the entire facility, the permittee shall submit a notification of compliance status report containing the information specified in 63.2520(d)(2) no later than 150 days after startup of the facility, as defined in 63.2550.

(Ref.: 40 CFR 63.2520(d), Subpart FFFF)

- 6.5. For Emission Points AO-018, AO-036, and AO-037, the permittee shall demonstrate compliance with Conditions 3.10 and 3.11(b) by submitting semiannual reports to the Office of Pollution Control. The initial report shall be submitted within 6 months after the initial start-up date. The semiannual reports shall contain any recalculations of the TRE index value, required by Condition 5.1.

(Ref.: 40 CFR 60.665(l), Subpart NNN)

- 6.6. For Emission Point AO-038, the permittee shall submit all applicable notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h). An Initial Notification shall be submit no later than 15 days after the actual date of startup.

The permittee is not required to submit an initial compliance demonstration; however, the permittee shall demonstrate compliance with Condition 4.1 by submitting the following:

- a) A description of the Emission Point AO-038 including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with Subpart DDDDD, description of the fuel(s) burned, and justification for the selection of fuel(s) burned during the compliance demonstration.
- b) In addition to the information required in 63.9(h)(2), the notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official: “This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR 63, Subpart DDDDD at the site according to the procedures in 63.7540(a)(10)(i) through (vi).”

(Ref.: 40 CFR 63.7545(a), (b), (e)(1), (8)(i), 63.7495(a), Subpart DDDDD)

- 6.7. For Emission Point AO-038, the permittee shall submit a 5-year compliance report. The first compliance report shall cover the period beginning on the compliance date (i.e. startup date) and ending on December 31st within 5 years after the startup date.

The 5-year compliance report shall contain the following information:

- a) Company and Facility name and address
- b) Process unit information, emissions limitations, and operating parameter limitations.
- c) Date of report and beginning and ending dates of the reporting period.
- d) The total operating time during the reporting period.
- e) Date of the most recent 5-year tune-up. Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

- f) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(Ref.: 40 CFR 63.7550(b), (b)(1), 63.7495(a), 63.7550(c)(1), (c)(5)(i) through (iv), (xiv), (xvii), Subpart DDDDD)

- 6.8. For Emission Points AO-039, AO-040, AO-041, and AO-042, the shall notify the Office of Pollution Control within 30 days when the maximum true vapor pressure of the liquid exceeds a true vapor pressure of 27.6 kPa for each tank.

(Ref.: 40 CFR 60.116b(d), Subpart Kb)