



## State of Mississippi

### AIR POLLUTION CONTROL PERMIT

To Construct Air Emissions Equipment



### THIS CERTIFIES

EmberClear GTL LLC, Port Bienville Gas to Gasoline  
3011 Port and Harbor Drive  
Bay St. Louis, MS  
Hancock County

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

Mississippi Department of Environmental Quality

Issued/Modified: SEP 20 2016

Expires:

Permit No. 1000-00056

Agency Interest # 66944

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**To Construct Air Emissions Equipment**  
EmberClear GTL LLC, Port Bienville Gas to Gasoline  
Subject Item Inventory  
Permit Number: 1000-00056  
Activity ID No.: PER20160001

**Subject Item Inventory:**

<b>ID</b>	<b>Designation</b>	<b>Description</b>
AI66944		Natural Gas to Gasoline Processing Facility
AREA1	AF-001	Equipment Leak Fugitives from Methane Process
AREA2	AF-002	Equipment Leak Fugitives from Gasoline Process
CONT1	AC-005	Regenerative Thermal Oxidizer shared by AT-004, AT-005, AT-006, and AT-007
EQPT1	AC-001	226 MMBTU/hr Natural Gas or Purge Gas Reformer Boiler (RB-1) equipped with a Catalytic Oxidizer on exhaust to reduce CO and a Selective Catalytic Reactor to reduce NOx
EQPT2	AC-004	Cooling Tower (CT) with 0.005% Drift Rate
EQPT3	AA-001	867 MMBTU/hr Natural Gas or Purge Gas Methanol Steam Reformer (RF-1) equipped with a Catalytic Oxidizer on exhaust to reduce CO and a Selective Catalytic Reactor to reduce NOx
EQPT4	AF-004	Wastewater Treatment Plant
EQPT5	AT-001	1,470,000 gallon Fixed Roof Crude Methanol Storage Tank (T-1) venting to a water scrubber and equipped with a vapor recovery system to reduce VOC emissions.
EQPT6	AT-002	2,940,000 Gallon Internal Floating Roof Methanol Day Storage Tank (T-2)
EQPT7	AT-003	2,940,000 Gallon Internal Floating Roof Methanol Day Storage Tank (T-3)
EQPT8	AT-004	8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-4) equipped with a Regenerative Thermal Oxidizer
EQPT9	AT-005	8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-5) equipped with a Regenerative Thermal Oxidizer
EQPT10	AT-006	8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-6) equipped with a Regenerative Thermal Oxidizer
EQPT11	AT-007	8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-7) equipped with a Regenerative Thermal Oxidizer
EQPT12	AT-008	630,000 Gallon Internal Floating Roof MTG Gasoline Day Tank (T-8)
EQPT13	AT-009	630,000 Gallon Internal Floating Roof MTG Gasoline Day Tank (T-9)
EQPT14	AT-010	714,000 Gallon Internal Floating Roof MTG Heavy Gasoline Day Storage Tank (T-10)
EQPT15	AT-011	1,500 Gallon Diesel Storage Tank

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**Subject Item Inventory:**

<b>ID</b>	<b>Designation</b>	<b>Description</b>
EQPT16	AB-001	2.6 MMBTU/hr Natural Gas or Purge Gas HGT (Heavy Gasoline Treatment) Reactor Charge Heater (HGT-RCH) equipped with Low NOx Burners
EQPT17	AB-002	26.0 MMBTU/hr Natural Gas or Purge Gas MTG (Methanol to Gasoline) Regeneration Heater (MTG-RCH) equipped with Low NOx Burners
EQPT18	AB-003	16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-1) equipped with Low NOx Burners
EQPT19	AB-004	16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-2) equipped with Low NOx Burners
EQPT20	AB-005	16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-3) equipped with Low NOx Burners
EQPT21	AB-006	16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-4) equipped with Low NOx Burners
EQPT22	AB-007	16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-5) equipped with Low NOx Burners
EQPT23	AC-002	7,500 hp Diesel Fired Emergency Generator (EGN)
EQPT24	AC-003a	325 hp Diesel Fired Emergency Fire Pump Engine (FP)
EQPT25	AF-003	0.05 MMBTU/hr Natural Gas Fired Flare
EQPT26	AC-003b	325 hp Diesel Fired Emergency Fire Pump Engine (FP)
EQPT27	AC-003c	325 hp Diesel Fired Emergency Fire Pump Engine (FP)
EQPT28	AC-003d	325 hp Diesel Fired Emergency Fire Pump Engine (FP)
EQPT29	AC-003e	325 hp Diesel Fired Emergency Fire Pump Engine (FP)
EQPT30	AC-003f	325 hp Diesel Fired Emergency Fire Pump Engine (FP)
EQPT31	AC-003g	325 hp Diesel Fired Emergency Fire Pump Engine (FP)
EQPT32	AC-003h	325 hp Diesel Fired Emergency Fire Pump Engine (FP)

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**Subject Item Groups:**

ID	Description	Components
GRPT1	Methanol Plant	EQPT3 867 MMBTU/hr Natural Gas or Purge Gas Methanol Steam Reformer (RF-1) equipped with a Catalytic Oxidizer on exhaust to reduce CO and a Selective Catalytic Reactor to reduce NOx
		EQPT5 1,470,000 gallon Fixed Roof Crude Methanol Storage Tank (T-1) venting to a water scrubber and equipped with a vapor recovery system to reduce VOC emissions.
		EQPT6 2,940,000 Gallon Internal Floating Roof Methanol Day Storage Tank (T-2)
		EQPT7 2,940,000 Gallon Internal Floating Roof Methanol Day Storage Tank (T-3)
GRPT2	Methanol to Gasoline Plant	EQPT8 8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-4) equipped with a Regenerative Thermal Oxidizer
		EQPT9 8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-5) equipped with a Regenerative Thermal Oxidizer
		EQPT10 8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-6) equipped with a Regenerative Thermal Oxidizer
		EQPT11 8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-7) equipped with a Regenerative Thermal Oxidizer
		EQPT12 630,000 Gallon Internal Floating Roof MTG Gasoline Day Tank (T-8)
		EQPT13 630,000 Gallon Internal Floating Roof MTG Gasoline Day Tank (T-9)
		EQPT14 714,000 Gallon Internal Floating Roof MTG Heavy Gasoline Day Storage Tank (T-10)
		EQPT16 2.6 MMBTU/hr Natural Gas or Purge Gas HGT (Heavy Gasoline Treatment) Reactor Charge Heater (HGT-RCH) equipped with Low NOx Burners
		EQPT17 26.0 MMBTU/hr Natural Gas or Purge Gas MTG (Methanol to Gasoline) Regeneration Heater (MTG-RCH) equipped with Low NOx Burners
		EQPT18 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-1) equipped with Low NOx Burners
		EQPT19 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-2) equipped with Low NOx Burners
		EQPT20 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-3) equipped with Low NOx Burners
		EQPT21 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-4) equipped with Low NOx Burners
		EQPT22 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-5) equipped with Low NOx Burners

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**Subject Item  
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ID	Description	Components
GRPT3	Utility Plant	EQPT1 226 MMBTU/hr Natural Gas or Purge Gas Reformer Boiler (RB-1) equipped with a Catalytic Oxidizer on exhaust to reduce CO and a Selective Catalytic Reactor to reduce NOx
		EQPT2 Cooling Tower (CT) with 0.005% Drift Rate
		EQPT15 1,500 Gallon Diesel Storage Tank
		EQPT23 7,500 hp Diesel Fired Emergency Generator (EGN)
		EQPT24 325 hp Diesel Fired Emergency Fire Pump Engine (FP)
GRPT4	Fuel Burning Requirements	EQPT1 226 MMBTU/hr Natural Gas or Purge Gas Reformer Boiler (RB-1) equipped with a Catalytic Oxidizer on exhaust to reduce CO and a Selective Catalytic Reactor to reduce NOx
		EQPT3 867 MMBTU/hr Natural Gas or Purge Gas Methanol Steam Reformer (RF-1) equipped with a Catalytic Oxidizer on exhaust to reduce CO and a Selective Catalytic Reactor to reduce NOx
		EQPT16 2.6 MMBTU/hr Natural Gas or Purge Gas HGT (Heavy Gasoline Treatment) Reactor Charge Heater (HGT-RCH) equipped with Low NOx Burners
		EQPT17 26.0 MMBTU/hr Natural Gas or Purge Gas MTG (Methanol to Gasoline) Regeneration Heater (MTG-RCH) equipped with Low NOx Burners
		EQPT18 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-1) equipped with Low NOx Burners
		EQPT19 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-2) equipped with Low NOx Burners
		EQPT20 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-3) equipped with Low NOx Burners
		EQPT21 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-4) equipped with Low NOx Burners
		EQPT22 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-5) equipped with Low NOx Burners
		EQPT25 0.05 MMBTU/hr Natural Gas Fired Flare

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ID	Description	Components
GRPT5	NSPS Subpart Kb Requirements	EQPT5 1,470,000 gallon Fixed Roof Crude Methanol Storage Tank (T-1) venting to a water scrubber and equipped with a vapor recovery system to reduce VOC emissions.
		EQPT6 2,940,000 Gallon Internal Floating Roof Methanol Day Storage Tank (T-2)
		EQPT7 2,940,000 Gallon Internal Floating Roof Methanol Day Storage Tank (T-3)
		EQPT8 8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-4) equipped with a Regenerative Thermal Oxidizer
		EQPT9 8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-5) equipped with a Regenerative Thermal Oxidizer
		EQPT10 8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-6) equipped with a Regenerative Thermal Oxidizer
		EQPT11 8,400,000 Gallon Internal Floating Roof MTG Product Gasoline Storage Tank (T-7) equipped with a Regenerative Thermal Oxidizer
		EQPT12 630,000 Gallon Internal Floating Roof MTG Gasoline Day Tank (T-8)
		EQPT13 630,000 Gallon Internal Floating Roof MTG Gasoline Day Tank (T-9)
		EQPT14 714,000 Gallon Internal Floating Roof MTG Heavy Gasoline Day Storage Tank (T-10)

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ID	Description	Components
GRPT6	Emergency Generator/Fire Pump Requirements	EQPT23 7,500 hp Diesel Fired Emergency Generator (EGN)
		EQPT24 325 hp Diesel Fired Emergency Fire Pump Engine (FP)
		EQPT26 325 hp Diesel Fired Emergency Fire Pump Engine (FP)
		EQPT27 325 hp Diesel Fired Emergency Fire Pump Engine (FP)
		EQPT28 325 hp Diesel Fired Emergency Fire Pump Engine (FP)
		EQPT29 325 hp Diesel Fired Emergency Fire Pump Engine (FP)
		EQPT30 325 hp Diesel Fired Emergency Fire Pump Engine (FP)
		EQPT31 325 hp Diesel Fired Emergency Fire Pump Engine (FP)
		EQPT32 325 hp Diesel Fired Emergency Fire Pump Engine (FP)
GRPT7	Heater Testing Requirements	EQPT17 26.0 MMBTU/hr Natural Gas or Purge Gas MTG (Methanol to Gasoline) Regeneration Heater (MTG-RCH) equipped with Low NOx Burners
		EQPT18 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-1) equipped with Low NOx Burners
		EQPT19 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-2) equipped with Low NOx Burners
		EQPT20 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-3) equipped with Low NOx Burners
		EQPT21 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-4) equipped with Low NOx Burners
		EQPT22 16.5 MMBTU/hr Natural Gas or Purge Gas MTG Reactor Heater (MTGH-5) equipped with Low NOx Burners



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**KEY**

ACT = Activity

AREA = Area

CONT = Control Device

IA = Insignificant Activity

MAFO = Animal Feeding Operation

RPNT = Release Point

WDPT = Withdrawal Point

AI = Agency Interest

CAFO = Concentrated Animal Feeding Operation

EQPT = Equipment

IMPD = Impoundment

PCS = PCS

TRMT = Treatment

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**AI0000066944 Natural Gas to Gasoline Processing Facility:**

**Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		The permittee shall operate all air pollution control devices when the respective gas-to-liquids (GTL) processes are operating. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-2		The permittee shall comply with the applicable provisions in 40 CFR 63.11115, 63.11116, 63.11117, or 63.11118 (Subpart CCCCCC). [40 CFR 63.11115, 40 CFR 63.11116]

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1		The permittee shall comply with the applicable monitoring requirements in 40 CFR 60.663 (Subpart NNN). [40 CFR 60.663]
M-2		The permittee shall comply with the applicable monitoring requirements in 40 CFR 60.703 (Subpart RRR). [40 CFR 60.703]
M-3		The permittee shall comply with the monitoring, testing and recordkeeping required by 40 CFR 60.482a, 60.485a, and 60.486a (Subpart VVa) for all equipment in VOC service. [40 CFR 60.482a, 40 CFR 60.485a, 40 CFR 60.486a]
M-4		The permittee shall comply with the applicable monitoring requirements in 40 CFR 63.11120 (Subpart CCCCCC). [40 CFR 63.11120]

**Record-Keeping Requirements:**

Condition No.	Condition
R-1	The permittee shall comply with the applicable recordkeeping requirements in 40 CFR 63.11125 (Subpart CCCCCC). [40 CFR 63.11125]

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**Submittal/Action Requirements:**

Condition No.	Condition
S-1	General Condition: The permittee shall submit certification of construction: Due within thirty (30) days of completion of construction or installation of an approved stationary source or prior to startup, whichever is earlier. The notification shall certify that construction or installation was performed in accordance with the approved plans and specifications. In the event there is any change in construction from the previously approved plans and specifications or permit, the permittee shall promptly notify MDEQ in writing. If MDEQ determines the changes are substantial, MDEQ 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. [11 Miss. Admin. Code Pt. 2, R. 2.5.D.]
S-2	The permittee shall submit a complete operating permit application that contains "as-built" specifications along with applicable federal monitoring requirements and monitoring parameters necessary to ensure compliance with the PSD-avoidance limits. This application shall be submitted within 30 days of completion of construction or installation of an approved stationary source or prior to startup, whichever is earlier. [11 Miss. Admin. Code Pt. 2, R. 2.5.D]
S-3	Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. [11 Miss. Admin.Code Pt. 2, R.2.5.C (2).]
S-4	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. [11 Miss. Admin.Code Pt. 2, R.2.5.C(4).]
S-5	The permittee shall comply with the applicable reporting requirements in 40 CFR 60.665 (Subpart NNN). [40 CFR 60.665]
S-6	The permittee shall comply with the applicable reporting requirements in 40 CFR 60.705 (Subpart RRR). [40 CFR 60.705]
S-7	The permittee shall comply with the applicable reporting requirements in 40 CFR 60.487a (Subpart VVa). [40 CFR 60.487a]
S-8	The permittee shall comply with the applicable reporting requirements in 40 CFR 63.11126 (Subpart CCCCCC). [40 CFR 63.11126]

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**Narrative Requirements:**

**General Condition:**

Condition No.	Condition
T-1	General Condition: The stationary source shall be designed and constructed so as to operate without causing a violation of any Applicable Rules and Regulations or this permit, 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. [11 Miss. Admin.Code Pt. 2, R.2.5.A.]
T-2	General Condition: Any activities not identified in the application are not authorized by this permit. [Miss. Code Ann. 49_17_29 1.b]
T-3	General Condition: 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. [Miss. Code Ann. 49_17_29]
T-4	General Condition: 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 Regulation 11 Miss. Admin. Code Pt.2, R. 1.10 "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. [11 Miss. Admin. Code Pt. 2, R. 1.10]
T-5	General Condition: The permittee shall allow the Mississippi Environmental Quality Commission, the Mississippi Environmental Quality Permit Board, MDEQ staff and/or their authorized representatives, upon the presentation of credentials: a. To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring equipment or monitoring method required in this permit, and to sample any air emission. [Miss. Code Ann. 49_17_21]
T-6	General Condition: After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for good cause shown including, but not limited to, the following: a. Persistent violation of any terms or conditions of this permit; b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or c. A change in any condition that requires either a temporary or permanent reduction or elimination of previously authorized air emissions. [11 Miss. Admin.Code Pt. 2, R.2.2.C.]

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**Narrative Requirements:**

Condition No.	Condition
T-7	General Condition: 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. [Miss. Code Ann. 49_17_39]
Condition No.	Condition
T-8	General Condition: This permit is for air pollution control purposes only. [11 Miss. Admin.Code Pt. 2, R.2.1.D.]
T-9	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.2.B(5).]
T-10	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.1.D(6).]
T-11	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.1.D(7).]
T-12	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(a).]
T-13	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(b).]
T-14	General Condition: The permit does not convey any property rights of any sort, or any exclusive privilege. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(c).]

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**Narrative Requirements:**

Condition No.	Condition
T-15	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15) (d).]
T-16	General Condition: This permit shall not be transferred except upon approval of the Permit Board. [11 Miss. Admin.Code Pt. 2, R.2.16.B.]
T-17	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.1.1.D(7).]
T-18	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.5.C(1).]
T-19	General Condition: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee. [11 Miss. Admin.Code Pt. 2, R.2.5.D(3).]
T-20	General Condition: Except as prohibited in 11 Miss. Admin. Code Pt. 2,R. 2.5.D(7) 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. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).]
T-21	General Condition: Except as otherwise specified in 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7), 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. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).]

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**Narrative Requirements:**

Condition No.	Condition
T-22	General Condition: Except as otherwise specified in 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7), 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. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).]
T-23	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.5.D(7).]
T-24	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.6.B(3),(4)&(6).]
T-25	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.5.A(4).]
T-26	The permittee is subject to and shall comply with all applicable provisions 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). [40 CFR 60.660]
T-27	The permittee is subject to and shall comply with all applicable provisions of the Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes (40 CFR 60, Subpart RRR). [40 CFR 60.700]
T-28	The permittee is subject to and shall comply with all applicable provisions 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). [40 CFR 60.480a]

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**AI0000066944 Natural Gas to Gasoline Processing Facility:**

**Narrative Requirements:**

Condition No.	Condition
T-29	The permittee is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants for Gasoline Dispensing Facilities (40 CFR 63, Subpart CCCCCC). [40 CFR 63.11111]



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**EQPT0000000001 (AC-001) 226 MMBTU/hr Natural Gas or Purge Gas Reformer Boiler (RB-1) equipped with a Catalytic Oxidizer on exhaust to reduce CO and a Selective Catalytic Reactor to reduce NOx:**

**Limitation Requirements:**

Condition No.	Parameter	Condition
L-1	Carbon Monoxide	Carbon Monoxide: The maximum discharge of Carbon Monoxide shall not exceed 0.31 pounds per hour (3-hour average) as determined by EPA Test Method 10A, 40 CFR 60, Appendix A, or other EPA-approved test method. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-2	Nitrogen oxides	Nitrogen oxides: The maximum discharge of Nitrogen Oxides shall not exceed 0.5 pounds per hour (3-hour average) as determined by EPA Test Method 7, 40 CFR 60, Appendix A, or other EPA-approved test method. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-3	VOC	VOC: The maximum discharge of Volatile Organic Compounds shall not exceed 0.55 pounds per hour (3-hour average) as determined by EPA Test Methods 25 or 25A (expressed as propane), 40 CFR 60, Appendix A, or other EPA-approved test method. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-4		The permittee is exempt from the SO <sub>2</sub> emission limit in 40 CFR 60.42b(k)(1) due to combustion of only pipeline quality (low sulfur) natural gas with a potential SO <sub>2</sub> emission rate of 140 ng/J (0.31 lb/MMBTU) heat input or less. [40 CFR 60.42b(k)(2)]
L-5		The permittee shall not discharge gases containing NO <sub>x</sub> (expressed as NO <sub>2</sub> ) in excess of 86 ng/J (0.20 lb/MMBTU) heat input. This NO <sub>x</sub> standard applies at all times including periods of startup, shutdown, or malfunction. Compliance with this emission limit is determined on a 30-day rolling average basis. [40 CFR 60.44b(l)(1), 40 CFR 60.44b(h), 40 CFR 60.44b(i)]

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**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1		<p>For Emission Point AC-001, to demonstrate compliance with the NOx and CO emission limits, the permittee shall install, calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) for monitoring and recording the concentration by volume of NOx and CO emissions to the atmosphere.</p> <p>The CEMS shall be operated and data recorded during all periods of operation of the boiler except for CEMS breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments. The 1-hour average NOx and CO emission rates measured by the CEMS shall be expressed as lb/hr and shall be used to calculate the 3-hour rolling average emission rates. The CEMS shall meet the applicable performance specifications required by 40 CFR Part 60, Appendix B, the applicable quality assurance procedures required in 40 CFR Part 60, Appendix F, and the requirements of 40 CFR 60.13. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>
M-2		<p>For Emission Point AC-001, the permittee shall install, calibrate, maintain, and operate a stack gas volumetric flow rate monitor in order to determine compliance with the NOx and CO mass limits, as applicable. The monitor shall be calibrated, maintained, and operated in accordance with the manufacturer's recommendations, which shall be available for inspection by MDEQ personnel. All maintenance, calibration, and periods of malfunction shall be recorded in a log maintained at the site. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>
M-3		<p>For Emission Point AC-001, the permittee shall perform an initial stack test for VOC using EPA Test Method 25 or 25A within 180 days of initial startup to determine compliance with the pound per hour emission limit. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>
M-4		<p>To determine compliance with the emission limits for NOx required under 40 CFR 60.44b, the permittee shall conduct the performance test as required under 40 CFR 60.8 using the continuous system for monitoring NOx under 40 CFR 60.48(b).</p> <p>Following the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, the permittee shall determine compliance with the NOx standards in 40 CFR 60.44b through the use of a 30-day performance test. . A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NOx emission data for the preceding 30 steam generating unit operating days. [40 CFR 60.46b(e)(4)]</p>

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**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-5		The permittee shall install, calibrate, maintain, and operate CEMS for measuring NOx and O2 (or CO2) emissions discharged to the atmosphere, and shall record the output of the system. [40 CFR 60.48b(b)(1)]
M-6		The CEMS shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. [40 CFR 60.48b(c)]
M-7		The 1-hour average NOx emission rates measured by the continuous NOx monitor required by 40 CFR 60.48b(b) and required under 40 CFR 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under 40 CFR 60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2). [40 CFR 60.48b(d)]
M-8		The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems.
		For sources combusting coal, oil, or natural gas, the span value for NOx is determined using the following: Except as provided under 40 CFR 60.48b(e)(2)(ii), the NOx span values shall be 500 ppm. [40 CFR 60.48b(e)(1)]
M-9		When NOx emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of appendix A of this part, Method 7A of appendix A of this part, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days. [40 CFR 60.48b(f)]

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**Record-Keeping Requirements:**

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Condition No.	Condition
R-1	The permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. [40 CFR 60.49b(d)(1)]
R-2	All records required under 40 CFR 60, Subpart Db shall be maintained for a period of 2 years following the date of such record. [40 CFR 60.49b(o)]

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**Record-Keeping Requirements:**

Condition No.	Condition
R-3	<p>The permitte shall:</p> <p>(1) Elect to demonstrate that the affected facility combusts only very low sulfur oil, natural gas, wood, a mixture of these fuels, or any of these fuels (or a mixture of these fuels) in combination with other fuels that are known to contain an insignificant amount of sulfur in 40 CFR 60.42b(j) or 40 CFR 60.42b(k) shall obtain and maintain at the affected facility fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the oil meets the definition of distillate oil and gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b and the applicable sulfur limit. For the purposes of this section, the distillate oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition, natural gas, wood, and/or other fuels that are known to contain insignificant amounts of sulfur were combusted in the affected facility during the reporting period; or</p> <p>(2) Elect to demonstrate compliance based on fuel analysis in 40 CFR 60.42b or 40 CFR 60.43b shall develop and submit a site-specific fuel analysis plan to the Administrator for review and approval no later than 60 days before the date you intend to demonstrate compliance. Each fuel analysis plan shall include a minimum initial requirement of weekly testing and each analysis report shall contain, at a minimum, the following information:</p> <p>(i) The potential sulfur emissions rate of the representative fuel mixture in ng/J heat input;</p> <p>(ii) The method used to determine the potential sulfur emissions rate of each constituent of the mixture. For distillate oil and natural gas a fuel receipt or tariff sheet is acceptable;</p> <p>(iii) The ratio of different fuels in the mixture; and</p> <p>(iv) The permittee can petition the Administrator to approve monthly or quarterly sampling in place of weekly sampling. [40 CFR 60.49b(r), 40 CFR 60.45b(k), 40 CFR 60.47b(f)]</p>

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**Record-Keeping Requirements:**

Condition No.	Condition
R-4	<p>The source subject to the NOx standard in 40 CFR 60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions in the provisions of 40 CFR 60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored in 40 CFR 60.48b(g)(2) and the records to be maintained in 40 CFR 60.49b(g). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. An affected facility burning coke oven gas alone or in combination with other gaseous fuels or distillate oil shall submit this plan to the Administrator for approval within 360 days of the initial startup of the affected facility or by November 30, 2009, whichever date comes later. If the plan is approved, the permittee shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. The plan shall:</p> <p>(1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NOx emission rates (i.e., ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas O2 level);</p> <p>(2) Include the data and information that permittee used to identify the relationship between NOx emission rates and these operating conditions; and</p> <p>(3) Identify how these operating conditions, including steam generating unit load, will be monitored under 40 CFR 60.48b(g) on an hourly basis by the permittee during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the permittee under 40 CFR 60.49b(g). [40 CFR 60.49b(c)]</p>

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**Record-Keeping Requirements:**

Condition No.	Condition
R-5	<p>Except as provided under 40 CFR 60.49b(p), the source subject to the NOx standards under 40 CFR 60.44b shall maintain records of the following information for each steam generating unit operating day:</p> <ul style="list-style-type: none"><li>(1) Calendar date;</li><li>(2) The average hourly NOx emission rates (expressed as NO2) (ng/J or lb/MMBtu heat input) measured or predicted;</li><li>(3) The 30-day average NOx emission rates (ng/J or lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;</li><li>(4) Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the NOx emissions standards under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;</li><li>(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;</li><li>(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;</li><li>(7) Identification of “F” factor used for calculations, method of determination, and type of fuel combusted;</li><li>(8) Identification of the times when the pollutant concentration exceeded full span of the CEMS;</li><li>(9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and</li><li>(10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part. [40 CFR 60.49b(g)]</li></ul>

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**EQPT0000000001 (AC-001) 226 MMBTU/hr Natural Gas or Purge Gas Reformer Boiler (RB-1) equipped with a Catalytic Oxidizer on exhaust to reduce CO and a Selective Catalytic Reactor to reduce NOx:**

**Submittal/Action Requirements:**

Condition No.	Condition
S-1	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. 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). A stack test report containing the results of the test(s) shall be submitted within forty-five (45) days of completion of the required test(s). [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
S-2	<p>The permittee shall submit notification of the date of initial startup, as provided by 40 CFR 60.7. This notification shall include:</p> <p>(1) The design heat input capacity and identification of the fuels to be combusted in the affected facility;</p> <p>(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42b(d)(1), 60.43b(a)(2), (a)(3)(iii), (c)(2)(ii), (d)(2)(iii), 60.44b(c), (d), (e), (i), (j), (k), 60.45b(d), (g), 60.46b(h), or 60.48b(i); and</p> <p>(3) The annual capacity factor at which the permittee anticipates operating the facility based on all fuels fired and based on each individual fuel fired. [40 CFR 60.49b(a)]</p>
S-3	The reporting period for the reports required under 40 CFR 60, Subpart Db is each 6 month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR 60.49b(w)]
S-4	The permittee shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in appendix B of this part. The permittee shall submit to the Administrator the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility. [40 CFR 60.49b(b)]
S-5	<p>The permittee shall submit excess emission reports for any excess emissions that occurred during the reporting period.</p> <p>Excess emissions are defined as all 6-minute periods during which the average opacity exceeds the opacity standards under 40 CFR 60.43b(f).</p> <p>Excess emissions are defined as any calculated 30-day rolling average NOx emission rate, as determined under 40 CFR 60.46b(e), that exceeds the applicable emission limits in 40 CFR 60.44b. [40 CFR 60.49b(h)]</p>
S-6	The source subject to the continuous monitoring requirements for NOx under 40 CFR 60.48(b) shall submit reports containing the information recorded under 40 CFR 60.49b(g). [40 CFR 60.49b(i)]



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**Submittal/Action Requirements:**

**Narrative Requirements:**

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Condition No.	Condition
T-1	The permittee is subject to and shall comply with all provisions of Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60, Subpart Db). [40 CFR 60.40b]

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**EQPT0000000002 (AC-004) Cooling Tower (CT) with 0.005% Drift Rate:**

**Monitoring Requirements:**

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Condition No.	Parameter	Condition
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M-1		For Emission Point AC-004, the permittee shall maintain records of the design and manufacturer-guaranteed maximum total liquid drift of the cooling tower. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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**EQPT0000000003 (AA-001) 867 MMBTU/hr Natural Gas or Purge Gas Methanol Steam Reformer (RF-1) equipped with a Catalytic Oxidizer on exhaust to reduce CO and a Selective Catalytic Reactor to reduce NOx:**

**Limitation Requirements:**

Condition No.	Parameter	Condition
L-1	Carbon Monoxide	Carbon Monoxide: The maximum discharge of Carbon Monoxide shall not exceed 3.14 pounds per hour (3-hour average) as determined by EPA Test Method 10A, 40 CFR 60, Appendix A, or other EPA-approved test method. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-2	Hydrogen sulfide	Hydrogen sulfide: The permittee shall not cause or permit the emission of any gas stream with contains hydrogen sulfide in excess of one grain per 100 standard cubic feet. [11 Miss. Admin. Code Pt. 2, R. 1.4.B(2)]
L-3	Nitrogen oxides	Nitrogen oxides: The maximum discharge of Nitrogen Oxides shall not exceed 5.1 pounds per hour (3-hour average) as determined by EPA Test Method 7, 40 CFR 60, Appendix A, or other EPA-approved test method. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-4	VOC	VOC: The maximum discharge of Volatile Organic Compounds shall not exceed 1.24 pounds per hour (3-hour average) as determined by EPA Test Methods 25 or 25A (expressed as propane), 40 CFR 60, Appendix A, or other EPA-approved test method. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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**EQPT0000000003 (AA-001) 867 MMBTU/hr Natural Gas or Purge Gas Methanol Steam Reformer (RF-1) equipped with a Catalytic Oxidizer on exhaust to reduce CO and a Selective Catalytic Reactor to reduce NOx:**

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1		<p>For Emission Point AA-001, to demonstrate compliance with the NOx and CO emission limits, the permittee shall install, calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) for monitoring and recording the concentration by volume of NOx and CO emissions to the atmosphere.</p> <p>The CEMS shall be operated and data recorded during all periods of operation of the reformer except for CEMS breakdowns and repairs. Data shall be recorded during calibration checks, and zero and span adjustments. The 1-hour average NOx and CO emission rates measured by the CEMS shall be expressed as lb/hr and shall be used to calculate the 3-hour rolling average emission rates. The CEMS shall meet the applicable performance specifications required by 40 CFR Part 60, Appendix B, the applicable quality assurance procedures required in 40 CFR Part 60, Appendix F, and the requirements of 40 CFR 60.13. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>
M-2		<p>For Emission Point AA-001, the permittee shall install, calibrate, maintain, and operate a stack gas volumetric flow rate monitor in order to determine compliance with the NOx and CO mass limits, as applicable. The monitor shall be calibrated, maintained, and operated in accordance with the manufacturer's recommendations, which shall be available for inspection by MDEQ personnel. All maintenance, calibration, and periods of malfunction shall be recorded in a log maintained at the site. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>
M-3		<p>For Emission Point AA-001, the permittee shall perform an initial stack test for VOC using EPA Test Methods 25 or 25A within 180 days of initial startup to determine compliance with the pound per hour emission limit. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>

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**EQPT0000000003 (AA-001) 867 MMBTU/hr Natural Gas or Purge Gas Methanol Steam Reformer (RF-1) equipped with a Catalytic Oxidizer on exhaust to reduce CO and a Selective Catalytic Reactor to reduce NOx:**

**Submittal/Action Requirements:**

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Condition No.	Condition
S-1	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. 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). A stack test report containing the results of the test(s) shall be submitted within forty-five (45) days of completion of the required test(s). [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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**EQPT0000000017 (AB-002) 26.0 MMBTU/hr Natural Gas or Purge Gas MTG (Methanol to Gasoline) Regeneration Heater (MTG-RCH) equipped with Low NOx Burners:**

**Limitation Requirements:**

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Condition No.	Parameter	Condition
L-1		The permittee shall not operate more than 4380 hours in any 12-month period. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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**Record-Keeping Requirements:**

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Condition No.	Condition
R-1	The permittee shall record hours of operation for each month and total hours for each consecutive 12 month period. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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**EQPT0000000025 (AF-003) 0.05 MMBTU/hr Natural Gas Fired Flare:**

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1		Method 22 of 40 CFR 60, Appendix A shall be used to determine the compliance of flares with the visible emission provisions. The observation period is 2 hours and shall be used according to Method 22. [40 CFR 60.18(f)(1)]
M-2		The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18(f)(2)]

**Narrative Requirements:**

Condition No.	Condition
T-1	The permittee is subject to and shall comply with the applicable provisions of New Source Performance Standards for Flares found in 40 CFR 60.18(c) through (f). [40 CFR 60.18(b)]
T-2	<p>The permittee shall comply with the following for the flare:</p> <p>(1) The flare shall be designed for and operated with no visible emissions.</p> <p>(2) The flare shall be operated with a flame present at all times.</p> <p>(3) The flare shall adhere to either the heat content specifications in 40 CFR 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR 60.18(c)(4), or adhere to the requirements in 40 CFR 60.18(c)(3)(i).</p> <p>(4) The flare shall be steam-assisted, air-assisted, or non-assisted.</p> <p>(5) The flare shall be operated at all times when emissions may be vented to it. [40 CFR 60.18(c), 40 CFR 60.18(e)]</p>

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**GRPT0000000004 Fuel Burning Requirements:**

**Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		The maximum opacity from any point source or emissions at any time shall not exceed 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A. [11 Miss. Admin. Code Pt. 2, R. 1.3.8.B.]
L-2		The maximum permissible emission of ash and/or particulate matter (filterable only) from each 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. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).]
L-3		The maximum discharge of sulfur oxides from each 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. [11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).]
L-4		The permittee shall burn only natural gas or process gas produced onsite. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-5		<p>The maximum permissible emission of ash and/or particulate matter (filterable only) from each fossil fuel burning installations equal to or greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship</p> $E = 0.8808 * I^{(-0.1667)}$ <p>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. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b)]</p>



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**GRPT0000000005 NSPS Subpart Kb Requirements:**

**Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		For Emission Point AT-001, the permittee shall install, maintain, and operate a water scrubber for control of emissions vented from the crude methanol fixed roof storage tank. The water scrubber shall meet a 98% removal efficiency for methanol (a VOC), as determined using the methods in NSPS Subpart Kb. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-2		<p>For Emission Points AT-001, AT-004, AT-005, AT-006, and AT-007, the permittee shall equip each storage tank with a closed vent system and control device meeting the following specifications:</p> <p>(1) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR 60.485(b).</p> <p>(2) The control device shall be designed and operated to reduce inlet VOC emission by 95% or greater. [40 CFR 60.112b(a)(3)]</p>
L-3		For Emission Points AT-002, AT-003, AT-008, AT-009, and AT-010, the permittee shall equip each storage tank with a fixed roof in combination with an internal floating roof meeting the specifications in 40 CFR 60.112b(a)(1)(i - ix). [40 CFR 60.112b(a)(1)]

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**GRPT0000000005 NSPS Subpart Kb Requirements:**

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1		<p>For Emission Points AT-002, AT-003, AT-004, AT-005, AT-006, AT-007, AT-008, AT-009, and AT-010, the permittee shall:</p> <p>(1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the permittee shall repair the items before filling the storage vessel.</p> <p>(2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.</p> <p>(3) For vessels equipped with a double-seal system as specified in 40 CFR 60.112b(a)(1)(ii)(B):</p> <p>(i) Visually inspect the vessel as specified in 40 CFR 60.113b(a)(4) at least every 5 years; or</p> <p>(ii) Visually inspect the vessel as specified in 40 CFR 60.113b(a)(2). [40 CFR 60.113b(a)]</p>

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**GRPT0000000005 NSPS Subpart Kb Requirements:**

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-2		<p>For Emission Points AT-002, AT-003, AT-004, AT-005, AT-006, AT-007, AT-008, AT-009, and AT-010, the permittee shall:</p> <p>(1) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in 40 CFR 60.113b(a)(2) and (a)(3)(ii) and at intervals no greater than 5 years in the case of vessels specified in 40 CFR 60.113b(a)(3)(i).</p> <p>(2) Notify the MDEQ in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 CFR 60.113b(a)(1) and (a)(4) to afford the MDEQ the opportunity to have an observer present. If the inspection required by 40 CFR 60.113b(a)(4) is not planned and the permittee could not have known about the inspection 30 days in advance or refilling the tank, the permittee shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling. [40 CFR 60.113b(a)]</p>
M-3		<p>For Emission Points AT-001, AT-004, AT-005, AT-006, and AT-007, the permittee shall operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan, unless the plan was modified by the MDEQ during the review process. In this case, the modified plan applies. [40 CFR 60.113b(c)(2)]</p>
M-4		<p>The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. [40 CFR 60.116b(b)]</p>

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**GRPT0000000005 NSPS Subpart Kb Requirements:**

**Record-Keeping Requirements:**

Condition No.	Condition
R-1	<p>For Emission Points AT-002, AT-003, AT-008, AT-009, and AT-010, the permittee shall meet the following requirements.</p> <p>(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).</p> <p>(2) Keep a record of each inspection performed as required by 40 CFR 60.113b (a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).</p> <p>(3) If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the MDEQ within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.</p> <p>(4) After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the MDEQ within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR 61.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made. [40 CFR 60.115b(a)]</p>
R-2	<p>For Emission Points AT-001, AT-004, AT-005, AT-006, and AT-007, the permittee shall keep the following records.</p> <p>(1) A copy of the operating plan.</p> <p>(2) A record of the measured values of the parameters monitored in accordance with 40 CFR 60.113b(c)(2). [40 CFR 60.115b(c)]</p>

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**GRPT0000000005 NSPS Subpart Kb Requirements:**

**Submittal/Action Requirements:**

Condition No.	Condition
S-1	<p>For Emission Points AT-001, AT-004, AT-005, AT-006, and AT-007, the permittee shall submit for approval by the MDEQ an operating plan containing the information listed below.</p> <p>(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.</p> <p>(ii) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters). [40 CFR 60.113b(c)(1)]</p>

**Narrative Requirements:**

Condition No.	Condition
T-1	<p>The permittee is subject to and shall comply with the applicable provisions of 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). [40 CFR 60.110b(a)]</p>

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**GRPT0000000006 Emergency Generator/Fire Pump Requirements:**

**Limitation Requirements:**

Condition No.	Parameter	Condition
L-1		For Emission Point AC-002, the permittee shall comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power. The permittee shall operate and maintain the stationary CI ICE to achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4205(b), 40 CFR 60.4206]
L-2		For Emission Point AC-003, the permittee shall comply with the emission standards in Table 4 of Subpart IIII, for all pollutants. The permittee shall operate and maintain the stationary CI ICE to achieve the emission standards as required in 40 CFR 60.4205 over the entire life of the engines. [40 CFR 60.4205(c), 40 CFR 60.4206]
L-3		The permittee shall only use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. [40 CFR 60.4207(b)]
L-4		The permittee shall not operate the emergency engines in non-emergency situations for more than 52 hours per year for each, determined for each calendar year. [11 Miss. Admin. Code Pt. 2, R. 2.21B.10]

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1		The permittee shall install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]

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**GRPT0000000006 Emergency Generator/Fire Pump Requirements:**

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-2		<p>The permitte shall comply with the following requirements:</p> <p>(1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;</p> <p>(2) Change only those emission-related settings that are permitted by the manufacturer; and</p> <p>(3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you. [40 CFR 60.4211(a)]</p>
M-3		<p>The permittee shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), or 40 CFR 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4211(c)]</p>

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**GRPT0000000006 Emergency Generator/Fire Pump Requirements:**

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-4		<p>The permittee shall operate the emergency stationary ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year is prohibited. If you do not operate the engine according to the following requirements, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.</p> <p>(1) There is no time limit on the use of emergency stationary ICE in emergency situations.</p> <p>(2) You may operate your emergency stationary ICE for any combination of the purposes specified in 40 CFR 60.4211(f)(2) (i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph.</p> <p>(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.</p> <p>(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.</p> <p>(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [40 CFR 60.4211(f)]</p>



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**GRPT0000000006 Emergency Generator/Fire Pump Requirements:**

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-5		(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)]

**Record-Keeping Requirements:**

Condition No.	Condition
R-1	The permittee shall keep records of the operation of each engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b), 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]

**Narrative Requirements:**

Condition No.	Condition
T-1	The permittee shall meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart IIII, for compression ignition engines. No further requirements apply for such engines under Subpart ZZZZ. [40 CFR 63.6590(c)]
T-2	The permittee is subject to and shall comply with all the applicable provisions of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII). [40 CFR 60.4200(a)]

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**GRPT0000000007 Heater Testing Requirements:**

**Monitoring Requirements:**

Condition No.	Parameter	Condition
M-1		For Emission Points AB-002, AB-003, AB-004, AB-005, AB-006, and AB-007, the permittee shall perform an initial stack test on two of the six heaters for NOx within 180 days of initial startup to validate the 0.014 lb/MMBTU emission factor used in the application. The permittee shall use EPA Test Method 7, or other EPA-approved test method, to determine NOx emissions. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

**Submittal/Action Requirements:**

Condition No.	Condition
S-1	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. 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). A stack test report containing the results of the test(s) shall be submitted within forty-five (45) days of completion of the required test(s). [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

## GENERAL INFORMATION

EmberClear GTL LLC, Port Bienville Gas to Gasoline  
3011 Port and Harbor Drive  
Bay St. Louis, MS  
Hancock County

### Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
66944	EmberClear GTL, LLC	Official Site Name	11/10/2014	
2804500056	EmberClear GTL LLC, Port Bienville Gas to Gasoline	Air-AIRS AFS	12/01/2014	
100000056	EmberClear GTL LLC, Port Bienville Gas to Gasoline	Air-Construction	04/23/2015	

**Basin:** Coastal Streams Basin