

STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Capline Pipeline Company LLC, Capline Collierville Tank Farm
1000 Ft. East From the Intersection of
I-269 and Wingo Road
Byhalia, Mississippi
Marshall 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

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued:_____

Permit No.: 1780-00056

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	Description
AA-001	11,340,000-gallon Crude Oil Storage Tank with an External Floating Roof
AA-002	11,340,000-gallon Crude Oil Storage Tank with an External Floating Roof
AA-003	11,340,000-gallon Crude Oil Storage Tank with an External Floating Roof
AA-004	11,340,000-gallon Crude Oil Storage Tank with an External Floating Roof
AA-005	125 kW Diesel-fired, Compression Ignition, Emergency Engine
AA-006	Roof Landings, Tank Cleaning Emissions, and Fugitives

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	Opacity	≤ 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2	Equivalent Opacity	≤ 40%
AA-001 AA-002 AA-003 AA-004	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)	3.3	VOC	Applicability
	40 CFR 60.110b(a), Subpart Kb			
	40 CFR 60.112b(a)(2), Subpart Kb	3.4		External floating roof requirements
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.5		Do not store any VOL with a maximum true vapor pressure greater than 11.1 psia or comply with the requirements of 40 CFR 60.112b(b), Subpart Kb
AA-005	40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) 40 CFR 63.6585 and 63.6590(c)(1), Subpart ZZZZ	3.6	HAP	Applicability
	40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) 40 CFR 60.4200(a)(2), Subpart IIII	3.7		Applicability
	40 CFR 60.4205(b), 60.4202(a)(2), 60.4206, Subpart IIII 40 CFR 89.112(a) and Table 1, Subpart B	3.8	NMHC + NO _x	≤ 4.0 g/kW-hr
			CO	≤ 5.0 g/kW-hr
			PM	≤ 0.3 g/kW-hr
	40 CFR 60.4207(b), Subpart IIII 40 CFR 80.510(b), Subpart I	3.9	Fuel	Fuel provisions for nonroad diesel fuel
	40 CFR 60.4211(c), Subpart IIII	3.10	NMHC + NO _x , CO, and PM	Meet standards by purchasing certified engine
	40 CFR 60.4209(a), Subpart IIII	3.11	Hours of Operation	Install a non-resettable hour meter
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.12	PM	≤ 0.6 lb/MMBTU

- 3.1 For the entire facility, except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial, or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided below.
- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one-hour period and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
 - (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60% opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel any one hours.

(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% 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 Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee is subject to and shall comply with the 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 the General Provisions (40 CFR 60, Subpart A).

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

- 3.4 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall equip each storage vessel with an external floating roof meeting the following specifications:
- (a) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal.
 - (1) The primary seal shall be a mechanical shoe seal or a liquid mounted seal. Except as provided in paragraph (d) of **Condition 5.1**, the seal shall completely cover the annular space between the edge of the floating roof and tank wall.
 - (2) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in paragraph (d) of **Condition 5.1**.
 - (b) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid

surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90% of the area of the opening.

- (c) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(Ref.: 40 CFR 60.112b(a)(2), Subpart Kb)

- 3.5 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall store volatile organic liquids that, as stored, have a maximum true vapor pressure less than 11.1 psia or comply with the applicable provisions of 40 CFR 60.112b(b), Subpart Kb.

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

- 3.6 For Emission Point AA-005, the permittee is subject to and shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ) and the General Provisions (40 CFR 63, Subpart A). The permittee shall demonstrate compliance by meeting the requirements of 40 CFR 60, Subpart IIII. No further requirements under 40 CFR 63, Subpart ZZZZ, apply.

(Ref.: 40 CFR 63.6585 and 63.6590(c)(1), Subpart ZZZZ)

- 3.7 For Emission Point AA-005, the permittee is subject to and shall comply with the applicable requirements of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII) and the General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.4200(a)(2), Subpart IIII)

- 3.8 For Emission Point AA-005, the permittee shall meet the emission standards for new nonroad CI engines, as follows:

- (a) Non-methane Hydrocarbons + Nitrogen Oxides (NMHC + NO_x) ≤ 4.0 g/kW-hr
- (b) Carbon Monoxide (CO) ≤ 5.0 g/kW-hr
- (c) Particulate Matter (PM) ≤ 0.3 g/kW-hr

The permittee shall operate and maintain the engine so that the engine achieves the emission standards over the entire life of the engine.

(Ref.: 40 CFR 60.4205(b), 60.4202(a)(2), and 60.4206, Subpart III, and 40 CFR 89.112(a) and Table 1, Subpart B)

- 3.9 For Emission Point AA-005, the permittee shall only use diesel fuel that meets the following per gallon requirements below:

- (a) Sulfur content ≤ 15 ppm
- (b) Cetane index:
 - (1) A minimum of 40; or
 - (2) A maximum aromatic content of 35% volume.

(Ref.: 40 CFR 60.4207(b), Subpart IIII, and 40 CFR 80.510(b), Subpart I)

- 3.10 For Emission Point AA-005, the permittee shall comply with the emission standards in **Condition 3.8** by purchasing an engine certified to the emission standards. The engine must be installed and configured according to the manufacturer's emission-related specifications.

(Ref.: 40 CFR 60.4211(c), Subpart IIII)

- 3.11 For Emission Point AA-005, the permittee shall install a non-resettable hour meter prior to startup of the engine.

(Ref.: 40 CFR 60.4209(a), Subpart IIII)

- 3.12 For Emission Point AA-005, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.

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

SECTION 4 WORK PRACTICES

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Work Practice
AA-005	40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines)	4.1		Operation and maintenance
	40 CFR 60.4211(a), Subpart IIII			
	40 CFR 60.4211(f), Subpart IIII	4.2		Emergency operation

4.1 For Emission Point AA-005, the permittee shall operate and maintain the stationary CI internal combustion engine according to the manufacturer's emission-related written instructions. Change only those emission-related settings that are permitted by the manufacturer. The permittee must meet the requirements of 40 CFR 89, 94, and/or 1068, as they apply.

(Ref.: 40 CFR 60.4211(a), Subpart IIII)

4.2 For Emission Point AA-005, the permittee shall operate the engine as specified by this condition to be considered an emergency engine. Any operation other than that described below is prohibited. If the permittee does not operate the engine according to the requirements below, the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII, and must meet all requirements for non-emergency engines.

(a) There is no time limit on the use of emergency stationary ICE in emergency situations.

(b) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraphs (1) through (2) for a maximum of 100 hours per calendar year.

(1) 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 MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(2) 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. 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 paragraph (b) of this condition.

(Ref.: 40 CFR 60.4211(f), Subpart IIII)

SECTION 5 MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
AA-001 AA-002 AA-003 AA-004	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)	5.1	Seals	Monitoring
	40 CFR 60.113b(b)(1) through (4) and (6)(i), Subpart Kb			
	40 CFR 60.115(b)(3), Subpart Kb	5.2	Gap Measurement	Recordkeeping
	40 CFR 60.116b(b), Subpart Kb	5.3	Dimensions	Recordkeeping
	40 CFR 60.116b(c), Subpart Kb	5.4	VOL	Monitoring
	40 CFR 60.116b(a) and (e)(2), Subpart Kb	5.5	Vapor Pressure	Method for determination
AA-005	40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) 40 CFR 60.4214(b), Subpart IIII	5.6	Hours of Operation	Recordkeeping
AA-006	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.7	Number of Events	Recordkeeping

5.1 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall:

- (a) Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency.
 - (1) Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every five (5) years thereafter.
 - (2) Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.
 - (3) If the permittee ceases to store VOL for a period of one (1) year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of (1) and (2) of this condition.
- (b) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:

- (1) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.
 - (2) Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location.
 - (3) The total surface area of each gap described in (2) of this condition shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.
- (c) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in paragraph (d) of this condition.
- (d) Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in (1) and (2):
- (1) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.
 - (i) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.
 - (ii) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
 - (2) The secondary seal is to meet the following requirements:
 - (i) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(3) of this condition.
 - (ii) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.
 - (iii) There are to be no holes, tears, or other openings in the seal or seal fabric.
 - (3) If a failure that is detected during inspections required in paragraph (a) 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 MDEQ in

the inspection report required in **Condition 6.2**. Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- (e) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. If the external 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, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL.

(Ref.: 40 CFR 60.113b(b), Subpart Kb)

- 5.2 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall keep a record of each gap measurement performed in accordance with **Condition 5.1**. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

- (a) The date of measurement.
- (b) The raw data obtained in the measurement.
- (c) The calculations described in paragraphs (b) and (c) of **Condition 5.1**.

The permittee shall keep copies of all reports and records required by this condition for at least two (2) years.

(Ref.: 40 CFR 60.115b(b)(3), Subpart Kb)

- 5.3 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall maintain a record of the dimension of the storage vessels and an analysis showing the capacity of the storage vessel for the life of the storage vessel.

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

- 5.4 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

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

- 5.5 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall utilize available data on the storage temperature to determine the maximum true vapor pressure. For crude oil or refined petroleum products, the vapor pressure may be obtained by the following:

- (a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the MDEQ specifically

requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

- (b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

The permittee shall keep copies of these records for at least two (2) years.

(Ref.: 40 CFR 60.116b(a) and (e)(2), Subpart Kb)

- 5.6 For Emission Point AA-005, the permittee shall keep records of the operation of the 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.

(Ref.: 40 CFR 60.4214(b), Subpart IIII)

- 5.7 For Emission Point AA-006, the permittee shall record in log format the number of events of roof landings and tanks cleanings. This log should include information to support that emissions remain below 100 tons per year on rolling monthly total including but not limited to whether or not a temporary vapor combustion unit was utilized and the hours of ventilation.

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

SECTION 6 REPORTING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
AA-001 AA-002 AA-003 AA-004	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)	6.1	Report measurements
	40 CFR 60.115b(b)(1) and (2), Subpart Kb		
	40 CFR 60.115b(b)(4), Subpart Kb	6.2	Inspection reports
	40 CFR 60.113b(b)(5) and (6)(ii), Subpart Kb	6.3	Inspection notifications
AA-006	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.4	Tank cleaning and roof landings

6.1 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall meet the following:

- (a) Furnish MDEQ with a report that describes the control equipment and certifies that the control equipment meets the specifications of **Condition 3.4** and paragraphs (b) through (d) of **Condition 5.1**. This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3).
- (b) Within 60 days of performing the seal gap measurements required by paragraph (a) of **Condition 5.1**, furnish MDEQ with a report that contains:
 - (1) The date of measurement.
 - (2) The raw data obtained in the measurement.
 - (3) The calculations described in paragraph (b) and (c) of **Condition 5.1**.

(Ref.: 40 CFR 60.115b(b)(1) and (2), Subpart Kb)

6.2 For Emission Points AA-001, AA-002, AA-003, and AA-004, after each seal gap measurement that detects gaps exceeding the limitations specified in paragraph (d) of **Condition 5.1**, the permittee shall submit a report to MDEQ within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b) of **Condition 6.1** and the date the vessel was emptied or the repairs made and date of repair.

(Ref.: 40 CFR 60.115b(b)(4), Subpart Kb)

6.3 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall notify the MDEQ 30 days in advance of any gap measurements required by paragraph (a) of **Condition 5.1** to afford the MDEQ the opportunity to have an observer present. For all inspections required by paragraph (e) of **Condition 5.1**, the permittee shall notify the MDEQ in writing at least 30 days prior to the filling or refilling. If the inspection

required by paragraph (e) of **Condition 5.1** is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank, the permittee shall notify the MDEQ at least seven (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 MDEQ at least seven (7) days prior to the refilling.

(Ref.: 40 CFR 60.113b(b)(5) and (6)(ii), Subpart Kb)

- 6.4 For Emission Point AA-006, in the event that more than three (3) tank cleaning and roof landing events take place in a 12-month span, the permittee shall report to MDEQ a report demonstrating that VOC emissions have not surpassed 100 tons per year on a rolling monthly total. This will include calculations from data collected in **Condition 5.6**.