Alabama Department of Environmental Management

MAJOR SOURCE OPERATING PERMIT

PERMITTEE: SEP ESCAMBIA, LLC

FACILITY NAME: FLOMATON/FANNY CHURCH OIL AND GAS PRODUCTION FACILITY

FACILITY NO.: 502-0005

LOCATION: FLOMATON, ESCAMBIA COUNTY, ALABAMA

In accordance with and subject to the provisions of the Alabama Air Pollution Control Act of 1971, Ala. Code §§ 22-28-1 to 22-28-23, as amended, the Alabama Environmental Management Act, Ala. Code §§ 22-22A-1 to 22-22A-17, as amended, and rules and regulations adopted there under, and subject further to the conditions set forth in this permit, the Permittee is hereby authorized to construct, install and use the equipment, device or other article described above.

*Pursuant to the **Clean Air Act of 1990**, all conditions of this permit are federally enforceable by EPA, the Alabama Department of Environmental Management, and citizens in general. Those provisions which are not required under the **Clean Air Act of 1990** are considered to be state permit provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate sections of this permit.*

Issuance Date: DRAFT 8/25/2025

Expiration Date:

[THIS PAGE IS LEFT BLANK INTENTIONALLY]

TABLE OF CONTENTS

GENERAL PERMIT PROVISOS

Federally Enforceable Provisos	Regulations
1. Transfer	
This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another, or from one person to another, except as provided in Rule 335-3-16-.13(1)(a)5.	Rule 335-3-16-.02(6)
2. Renewals	
An application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of this permit.	Rule 335-3-16-.12(2)
The source for which this permit is issued shall lose its right to operate upon the expiration of this permit unless a timely and complete renewal application has been submitted within the time constraints listed in the previous paragraph.	
3. Severability Clause	
The provisions of this permit are declared to be severable and if any section, paragraph, subparagraph, subdivision, clause, or phrase of this permit shall be adjudged to be invalid or unconstitutional by any court of competent jurisdiction, the judgment shall not affect, impair, or invalidate the remainder of this permit, but shall be confined in its operation to the section, paragraph, subparagraph, subdivision, clause, or phrase of this permit that shall be directly involved in the controversy in which such judgment shall have been rendered.	Rule 335-3-16-.05(e)
4. Compliance	
(a) The permittee shall comply with all conditions of ADEM Admin. Code 335-3. Noncompliance with this permit will constitute a violation of the Clean Air Act of 1990 and ADEM Admin. Code 335-3 and may result in an enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application by the permittee.	Rule 335-3-16-.05(f)
(b) The permittee shall not use as a defense in an enforcement action that maintaining compliance with conditions of this permit would have required halting or reducing the permitted activity.	Rule 335-3-16-.05(g)
5. Termination for Cause	
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance will not stay any permit condition.	Rule 335-3-16-.05(h)

GENERAL PERMIT PROVISOS

Federally Enforceable Provisos	Regulations
6. Property Rights	
The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.	Rule 335-3-16-.05(i)
7. Submission of Information	
The permittee must submit to the Department within 30 days or for such other reasonable time as the Department may set any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by this permit.	Rule 335-3-16-.05(j)
8. Economic Incentives, Marketable Permits, and Emissions Trading	
No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.	Rule 335-3-16-.05(k)
9. Certification of Truth, Accuracy, and Completeness:	
Any application form, report, test data, monitoring data, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.	Rule 335-3-16-.07(a)
10. Inspection and Entry	
Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized representatives of the Alabama Department of Environmental Management and EPA to conduct the following:	Rule 335-3-16-.07(b)
(a) Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records must be kept pursuant to the conditions of this permit;	
(b) Review and/or copy, at reasonable times, any records that must be kept pursuant to the conditions of this permit;	
(c) Inspect, at reasonable times, this facility's equipment (including monitoring equipment and air pollution control equipment), practices, or operations regulated or required pursuant to this permit; and	

Federally Enforceable Provisos	Regulations
(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or other applicable requirements.	
11. Compliance Provisions	
(a) The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance.	Rule 335-3-16-.07(c)
(b) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.	
12. Compliance Certification	
A compliance certification shall be submitted annually within sixty (60) days of the date of issuance of this permit.	Rule 335-3-16-.07(e)
(a) The compliance certification shall include the following:	
(1) The identification of each term or condition of this permit that is the basis of the certification;	
(2) The compliance status;	
(3) The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with Rule 335-3-16-.05(c) (Monitoring and Recordkeeping Requirements);	
(4) Whether compliance has been continuous or intermittent; and	
(5) Such other facts as the Department may require to determine the compliance status of the source.	
(b) The compliance certification shall be submitted to:	
Alabama Department of Environmental Management Air Division P.O. Box 301463 Montgomery, AL 36130-1463	
and to:	
EPA Region 4 via email at EPA_R4_CAA_Reports@epa.gov or EPA's Compliance and Emissions Data Reporting Interface (CEDRI)	

GENERAL PERMIT PROVISOS

Federally Enforceable Provisos	Regulations
13. Reopening for Cause	
Under any of the following circumstances, this permit will be reopened prior to the expiration of the permit:	Rule 335-3-16-.13(5)
(a) Additional applicable requirements under the Clean Air Act of 1990 become applicable to the permittee with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire.	
(b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit.	
(c) The Department or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.	
(d) The Administrator or the Department determines that this permit must be revised or revoked to ensure compliance with the applicable requirements.	
14. Additional Rules and Regulations	
This permit is issued on the basis of Rules and Regulations existing on the date of issuance. In the event additional Rules and Regulations are adopted, it shall be the permit holder's responsibility to comply with such rules.	Ala. Code § 22-28-16(d), as amended
15. Equipment Maintenance or Breakdown	
(a) In the case of shutdown of air pollution control equipment (which operates pursuant to any permit issued by the Director) for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Director at least twenty-four (24) hours prior to the planned shutdown, unless such shutdown is accompanied by the shutdown of the source which such equipment is intended to control. Such prior notice shall include, but is not limited to the following:	Rule 335-3-1-.07(1), (2)
(1) Identification of the specific facility to be taken out of service as well as its location and permit number;	

Federally Enforceable Provisos	Regulations
(2) The expected length of time that the air pollution control equipment will be out of service; (3) The nature and quantity of emissions of air contaminants likely to occur during the shutdown period; (4) Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; (5) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period. (b) In the event that there is a breakdown of equipment or upset of process in such a manner as to cause, or is expected to cause, increased emissions of air contaminants which are above an applicable standard, the person responsible for such equipment shall notify the Director within 24 hours or the next working day and provide a statement giving all pertinent facts, including the estimated duration of the breakdown. The Director shall be notified when the breakdown has been corrected.	
16. Operation of Capture and Control Devices All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in a manner so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emission of air contaminants shall be established.	Ala. Code § 22-28-16(d), as amended
17. Obnoxious Odors This permit is issued with the condition that, should obnoxious odors arising from the plant operations be verified by Air Division inspectors, measures to abate the odorous emissions shall be taken upon a determination by the Alabama Department of Environmental Management that these measures are technically and economically feasible.	Rule 335-3-1-.08
18. Fugitive Dust (a) Precautions shall be taken to prevent fugitive dust emanating from plant roads, grounds, stockpiles, screens, dryers, hoppers, ductwork, etc. (b) Plant or haul roads and grounds will be maintained in the following manner so that dust will not become airborne. A minimum of one, or a	Rule 335-3-4-.02

Federally Enforceable Provisos	Regulations
combination, of the following methods shall be utilized to minimize airborne dust from plants or haul roads and grounds: (1) By the application of water any time the surface of the road is sufficiently dry to allow the creation of dust emissions by the act of wind or vehicular traffic; (2) By reducing the speed of vehicular traffic to a point below that at which dust emissions are created; (3) By paving; (4) By the application of binders to the road surface at any time the road surface is found to allow the creation of dust emissions. (c) Should one, or a combination, of the above methods fail to adequately reduce airborne dust from plant or haul roads and grounds, alternative methods shall be employed, either exclusively or in combination with one or all of the above control techniques, so that dust will not become airborne. Alternative methods shall be approved by the Department prior to utilization.	
19. <u>Additions and Revisions</u> Any modifications to this source shall comply with the modification procedures in Rules 335-3-16-.13 or 335-3-16-.14.	Rule 335-3-16-.13 and .14
20. <u>Recordkeeping Requirements</u> (a) Records of required monitoring information of the source shall include the following: (1) The date, place, and time of all sampling or measurements; (2) The date analyses were performed; (3) The company or entity that performed the analyses; (4) The analytical techniques or methods used; (5) The results of all analyses; and (6) The operating conditions that existed at the time of sampling or measurement.	Rule 335-3-16-.05(c)(2)

Federally Enforceable Provisos	Regulations
(b) Retention of records of all required monitoring data and support information of the source is required for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by the permit	
21. <u>Reporting Requirements</u>	
(a) Reports to the Department of any required monitoring shall be submitted at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in said reports. All required reports must be certified by a responsible official consistent with Rule 335-3-16-.04(9).	Rule 335-3-16-.05(c)(3)
(b) Deviations from permit requirements shall be reported within 48 hours or two (2) working days of such deviations, including those attributable to upset conditions as defined in the permit. The report will include the probable cause of said deviations, and any corrective actions or preventive measures that were taken.	
22. <u>Emission Testing Requirements</u>	
(a) Each point of emission which requires testing will be provided with sampling ports, ladders, platforms, and other safety equipment to facilitate testing performed in accordance with procedures established by Part 60, of Title 40 of the Code of Federal Regulations, as the same may be amended or revised.	Rule 335-3-1-.05(3) Rule 335-3-1-.04(1)
(b) The Air Division must be notified in writing at least 10 days in advance of all emission tests to be conducted and submitted as proof of compliance with the Department's air pollution control rules and regulations.	
(c) To avoid problems concerning testing methods and procedures, the following shall be included with the notification letter:	
(1) The date the test crew is expected to arrive, the date and time anticipated of the start of the first run, how many and which sources are to be tested, and the names of the persons and/or testing company that will conduct the tests.	

Federally Enforceable Provisos	Regulations
(2) A complete description of each sampling train to be used, including type of media used in determining gas stream components, type of probe lining, type of filter media, and probe cleaning method and solvent to be used (if test procedures require probe cleaning).	
(3) A description of the process(es) to be tested including the feed rate, any operating parameters used to control or influence the operations, and the rated capacity.	
(4) A sketch or sketches showing sampling point locations and their relative positions to the nearest upstream and downstream gas flow disturbances.	
(d) A pretest meeting may be held at the request of the source owner or the Air Division. The necessity for such a meeting and the required attendees will be determined on a case-by-case basis.	
(e) All test reports must be submitted to the Air Division within 30 days of the actual completion of the test unless an extension of time is specifically approved by the Air Division.	
23. <u>Payment of Emission Fees</u>	
Annual emission fees shall be remitted each year according to the fee schedule in ADEM Admin. Code r. 335-1-7-.04.	Rule 335-1-7-.04
24. <u>Other Reporting and Testing Requirements</u>	
Submission of other reports regarding monitoring records, fuel analyses, operating rates, and equipment malfunctions may be required as authorized in the Department's air pollution control rules and regulations. The Department may require emission testing at any time.	Rule 335-3-1-.04(1)
25. <u>Title VI Requirements (Refrigerants)</u>	
Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances as listed in 40 CFR Part 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.	40 CFR Part 82, Subpart F
(a) No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing,	

Federally Enforceable Provisos	Regulations
maintenance, or disposal of any device except as provided in 40 CFR Part 82, Subpart F.	
(b) The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR §82.166. Reports shall be submitted to the US EPA and the Department as required.	
26. Chemical Accidental Prevention Provisions	
If a chemical listed in Table 1 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Table 1, then:	40 CFR Part 68
(a) The owner or operator shall comply with the provisions in 40 CFR Part 68.	
(b) The owner or operator shall submit one of the following:	
(1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,	
(2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.	
27. Display of Permit	
This permit shall be kept under file or on display at all times at the site where the facility for which the permit is issued is located and will be made readily available for inspection by any or all persons who may request to see it.	Rule 335-3-14-.01(1)(d)
28. Circumvention	
No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminants emitted, conceals or dilutes any emission of air contaminant which would otherwise violate the Division 3 rules and regulations.	Rule 335-3-1-.10
29. Visible Emissions	
Unless otherwise specified in the Unit Specific provisos of this permit, any source of particulate emissions shall not discharge more than one 6-minute average opacity greater than 20% in any 60-minute period. At no time shall any source discharge a 6-minute average opacity of particulate emissions greater than 40%. Opacity will be determined by 40 CFR Part 60, Appendix A, Method 9, unless otherwise specified in the Unit Specific provisos of this permit.	Rule 335-3-4-.01(1)

GENERAL PERMIT PROVISOS

Federally Enforceable Provisos	Regulations
30. Fuel-Burning Equipment	
(a) Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge particulate emissions in excess of the emissions specified in Rule 335-3-4-.03.	Rule 335-3-4-.03
(b) Unless otherwise specified in the Unit Specific provisos of this permit, no fuel-burning equipment may discharge sulfur dioxide emissions in excess of the emissions specified in Rule 335-3-5-.01.	Rule 335-3-5-.01
31. Process Industries – General	
Unless otherwise specified in the Unit Specific provisos of this permit, no process may discharge particulate emissions in excess of the emissions specified in Rule 335-3-4-.04.	Rule 335-3-4-.04
32. Averaging Time for Emission Limits	
Unless otherwise specified in the permit, the averaging time for the emission limits listed in this permit shall be the nominal time required by the specific test method.	Rule 335-3-1-.05
33. Compliance Assurance Monitoring (CAM)	
Conditions (a) through (d) follow are general conditions applicable to emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the unit specific provisos and the attached CAM appendices.	
(a) **Operation of Approved Monitoring**	40 CFR 64.7
(1) *Commencement of operation*. The owner or operator shall conduct the monitoring required under this section and detailed in the unit specific provisos and CAM appendix of this permit (if required) upon issuance of the permit, or by such later date specified in the permit pursuant to 40 CFR §64.6(d).	
(2) *Proper maintenance*. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.	

Federally Enforceable Provisos	Regulations
(3) *Continued operation*. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.	
(4) *Response to excursions or exceedances*. (a) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. (b) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.	

Federally Enforceable Provisos	Regulations
(5) *Documentation of the need for improved monitoring*. After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Department and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.	
(b) **Quality Improvement Plan (QIP) Requirements**	40 CFR 64.8
(1) Based on the results of a determination made under Section 33(a)(4)(b) above, the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with 40 CFR §64.6(c)(3), the permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding five (5) percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.	
(2) Elements of a QIP:	
A. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.	
B. The plan initially shall include procedures for evaluating the control performance problems and based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:	
(i) Improved preventive maintenance practices.	

Federally Enforceable Provisos	Regulations

(ii) Process operation changes.

(iii) Appropriate improvements to control methods.

(iv) Other steps appropriate to correct control performance.

(v) More frequent or improved monitoring (only in conjunction with one or more steps under paragraphs (2)B.(i) through (iv) above).

(3) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(4) Following implementation of a QIP, upon any subsequent determination pursuant to Proviso 33(a)(4)(b) above, the Department may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

A. Failed to address the cause of the control device performance problems; or

B. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(5) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(c) **Reporting and Recordkeeping Requirements** — 40 CFR 64.9

(1) *General reporting requirements.*

A. On and after the date specified in Proviso 33(a)(1) above by which the owner or operator must use monitoring that meets the requirements of this part,

Federally Enforceable Provisos	Regulations

the owner or operator shall submit monitoring reports to the permitting authority in accordance with ADEM Admin. Code r. 335-3-16-.05(c)3.

B. A report for monitoring under this part shall include, at a minimum, the information required under ADEM Admin. Code r. 335-3-16-.05(c)3. and the following information, as applicable:

(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(iii) A description of the actions taken to implement a QIP during the reporting period as specified in Section 33(b) above. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(2) *General recordkeeping requirements.*

A. The owner or operator shall comply with the recordkeeping requirements specified in ADEM Admin. Code r. 335-3-16-.05(c)2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to Proviso 33(b) above and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

Federally Enforceable Provisos			Regulations
	B.	Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review and does not conflict with other applicable recordkeeping requirements.	
(d)	**Savings Provisions**		40 CFR 64.10
(1)	Nothing in this part shall:		
	A.	Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this part shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.	
	B.	Restrict or abrogate the authority of the Department to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.	
	C.	Restrict or abrogate the authority of the Department to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.	

GENERAL PERMIT PROVISOS

Federally Enforceable Provisos	Regulations
34. Permit Shield A permit shield exists under this operating permit in accordance with ADEM Admin. Code r. 335-3-16-.10 in that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance. The permit shield is based on the accuracy of the information supplied in the application for this permit. Under this shield, it has been determined that requirements listed as non-applicable in the application are not applicable to this source.	Rule 335-3-16-.10

SUMMARY PAGE FOR HP/LP PROCESS FLARE

Permitted Operating Schedule†: **24** Hours/Day x **365** Days/Year = **8,760** Hours/Year
† Except during leap year, Permitted Operating Schedule = **8,784** Hours/Year

Emission limitations:

EMISSION POINT	DESCRIPTION	POLLUTANT	EMISSION LIMIT	REGULATIONS
LP/HP Process Flare; w/ closed vent system		H_2S	Burn gas with 0.10 grains or more of H_2S/Scf	Rule 335-3-5-.03(1)
			Burn gas to maintain the offsite concentration at 20 ppbv or less	Rule 335-3-5-.03(2)
		Opacity	Except during one six (6) minute period in any sixty (60) minute period, no emission source shall discharge into the atmosphere particulate of an opacity greater than twenty percent (20%) opacity, as determined by a six (6) minute average.	Rule 335-3-4.-01(1)(a)
			AND	
			During the one six-minute period in any 60-minute period, emissions sources may not discharge into the atmosphere particulate of an opacity greater than forty percent (40%).	Rule 335-3-4.-01(1) (b)
		SO_2	1,000 Tons per rolling 12-month period	Rule 335-3-14-.04 [Anti-PSD]

EMISSION SOURCES CONTROLLED BY THE FLARE:

T6000-400 BBL Produced Water Storage Tank
T6100-280 BBL Gun Barrel Storage Tank
T6200-100 BBL Slop Oil Storage Tank
Pressurized Condensate Vessels
Reciprocating Compressor Seals
Upset Flaring Events
Produced Water & Slop Oil Truck Loading

PROVISOS FOR HP/LP PROCESS FLARE

Federally Enforceable Provisos	Regulations
Applicability	
1. The process flare is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16, "*Major Source Operating Permits*".	Rule 335-3-16-.03
2. The process flare is subject to the applicable requirements of ADEM Admin. Code r. 335-3-4-.01, "*Control of Particulate Emissions – Visible Emissions*".	Rule 335-3-4-.01(1)
3. The facility is subject to the requirements under ADEM Admin. Code r. 335-3-5-.03, "*Control of Sulfur Compound Emissions – Petroleum Production*"; the process flare is used to control sulfur emissions from the facility to demonstrate compliance with this rule.	Rule 335-3-5-.03(1)
4. The process flare has an enforceable limit for sulfur dioxide (SO_2) emissions in place in order to prevent them from being subject to the applicable provisions of ADEM Admin. Code r. 335-3-14, "*Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration (PSD)]"*.	Rule 335-3-14-.04 [Anti-PSD]
5. The process flare is subject to the applicable requirements of 40 CFR Part 64, "*Compliance Assurance Monitoring*" [CAM] as specified in General Permit Proviso 33 and in Appendix A of this permit.	40 CFR Part 64
Emissions Standards	
1. The process flare shall comply with the following opacity standards:	
(a) Except as specified in proviso 1(b) of this subpart, the process shall not discharge into the atmosphere particulate that results in an opacity greater than 20%, as determined by a 6-minute average.	Rule 335-3-4-.01(1)(a)
(b) Except during one six (6) minute period in any sixty (60) minute period, the process flare shall not discharge into the atmosphere particulate of an opacity greater than that designated as forty percent (40%) opacity.	Rule 335-3-4-.01(1)(b)
2. Except as is provided for in Proviso 2(a) below, each process gas stream containing more than 0.10 of a grain of hydrogen sulfide (H_2S) per standard cubic feet (SCF) shall not be emitted into the atmosphere unless it is properly burned to maintain the ground level concentrations of H_2S to less than twenty (20) parts per billion beyond plant property limits, averaged over a thirty (30) minute period.	Rule 335-3-5-.03(2)

PROVISOS FOR HP/LP PROCESS FLARE

Federally Enforceable Provisos	Regulations
(a) Provided vessels or equipment are being de-pressured and/or emptied and the reduced pressure will not allow flow of the process gas stream to the combustion device, the venting to the atmosphere of any gas stream shall be allowed, but the duration of the venting shall not exceed 15 continuous minutes.	Rule 335-3-14-.04 Rule 335-3-16-.05(a)
(b) A spark or flame shall be present at the flare tip at all times that a sour gas stream may be sent to the flare.	Rule 335-3-14-.04 Rule 335-3-16-.05(a)
(c) The H_2S feed rate to the flare shall not exceed 500 pounds per hour (lbs/hr) unless otherwise approved by the Department.	Rule 335-3-14-.04 Rule 335-3-16-.05(a)
(d) The produced water storage tank, pressurized condensate tank, compressor seals, and loading operations shall be equipped with a closed vent system that routes vapors to the facility flare for combustion.	Rule 335-3-14-.04 Rule 335-3-16-.05(a)
3. Sulfur dioxide (SO_2) emissions from the facility/process flare shall not exceed 1,000 tons per rolling 12-month period.	Rule 335-3-14-.04 [Anti-PSD]
Compliance and Performance Test Methods and Procedures	
1. Compliance with the opacity standards shall be determined using Method 9 of 40 CFR Part 60, Appendix A-4 to determine opacity from the stack emissions OR Method 22 of 40 CFR Part 60, Appendix A-7 to determine the duration of visible emissions from the process flare.	Rule 335-3-1-.05 Rule 335-3-4-.01(2)
(a) See *Appendix B*, "*Opacity Monitoring for Process Flare"* for additional details regarding procedures for opacity/smoke determinations.	
2. Each process gas stream, including tank vapors that can be sent to the process flare, shall be tested in accordance with the following requirements:	Rule 335-3-1-.05
(a) A sample of each process gas stream that can be sent to the flare shall be collected and analyzed to determine the H_2S content of each gas stream utilizing one of the following methods:	
(1) Chromatographic analysis procedures found in ASTM E260.	

PROVISOS FOR HP/LP PROCESS FLARE

Federally Enforceable Provisos	Regulations
(2) Stain tube procedures found in GPA 2377-86 or those provided by the stain tube manufacturer that have been approved by EPA. [H_2S Content (Mole %)]	
(b) A sample of each process gas stream that can be sent to the flare shall be collected and analyzed to determine the volatile organic compound (VOC) molecular weight (MW), British thermal unit (Btu) heat content, and the molecular weight of each process gas stream utilizing one of the following methods:	
(1) ASTM Analysis Method D1826-77 to determine the heating value of the gaseous fuel. [Stream Heat Content (Btu/Scf)]	
(2) Chromatographic analysis procedures found in 40 CFR Part 60 Appendix A, Method 18 to measure gaseous organic compounds. [Stream MW (lb/lbmol)] [Stream VOC MW (lb/lbmol)]	
Emission Monitoring	
1. Compliance Assurance Monitoring (CAM) and Periodic Monitoring for the process flare shall be met by complying with the requirements specified in *Appendix A*, *"Process Flare Monitoring"*.	Rule 335-3-16-.05(c)1 40 CFR §64.6(b) & (c)
2. Provided that visible emissions are observed when a gas stream, other than the pilot gas stream is routed to the process flare, opacity monitoring shall be met by complying with the requirements specified in *Appendix B*, "*Opacity Monitoring for Process Flare"*.	Rule 335-3-16-.05(c)1
3. Each process gas stream that can be sent to the flare shall be tested according to the following requirements:	Rule 335-3-16-.05(c)1
(a) Testing for the H_2S content shall consist of capturing and analyzing one representative sample of each stream at a frequency of no less than once every 12 months.	

PROVISOS FOR HP/LP PROCESS FLARE

Federally Enforceable Provisos	Regulations
(b) Testing for the VOC molecular weight, BTU heat content, and stream molecular weight shall consist of capturing and analyzing one representative sample of each stream at a frequency of no less than once every twelve (12) months.	
(c) Provided multiple process streams can be sent to the flare, and it is possible to capture a common stream whose contents would be representative of all the streams, that common stream may be used instead of the individual process streams.	
Recordkeeping and Reporting Requirements	
1. The following records shall be readily available and maintained in a form suitable for inspection for a period of at least five years from the date of each event:	Rule 335-3-16-.05(c)2
(a) Volume of Gas Burned in Flare [Stream Volume Burned (thousand standard cubic feet per Month (MScf/Month)]	
(b) SO_2 emissions [(Tons/Month, Tons/rolling 12-months)]	
(1) Stream H_2S (lbs/Month) = [Volume Flared (MScf/Month)] X {1 Mole/0.380 MScf} X [Stream H_2S Content (Mol% H_2S)/100] X [34 Lbs H_2S/Mol% H_2S]	
(2) Stream H_2S (lbs/Hr) = $\frac{\text{Flare } H_2S \text{ Feed Rate (lbs/Month)}}{\text{Operating Hours (Hrs/Month)}}$	
(c) Number of Hours Flare Operated [Hours (Hrs/Month, Hrs/rolling 12-months)]	
(d) Records of each daily visual inspection of the flare tip for the presence of a spark or flame.	
(e) Records of each daily visual inspection of the flare for visible emissions.	

Federally Enforceable Provisos	Regulations
(f) Records of each occurrence when a visible emission observation was conducted on the flare shall be maintained. (1) If a Method 9 observation is conducted, the results should be documented on the "Visible Emission Observation Form" available in EPA's Visible Emissions Field Manual. (2) If a Method 22 determination is conducted, the results should be documented on the field data sheet (Figure 22-1) in EPA's Visible Emissions Field Manual. (g) Record of the date, starting time, and duration of each deviation from the requirements specified in this permit along with the cause and corrective actions taken. (h) A record for emissions (tons per year) determination of all applicable regulated pollutants shall be maintained for Title V reporting purposes for all sources of emissions from the facility.	
2. A Periodic Monitoring Report (PMR) meeting the requirements specified in Provisos 2(a) through (c) below shall be submitted to the Department. (a) The report shall identify each incidence of deviation from a permit term or condition including those that occur during startups, shutdowns, and malfunctions. (1) A deviation shall mean any condition determined by observation, by data derived from any monitoring or testing or recordkeeping which is required by the permit that can be used to determine or indicate compliance, that identifies an affected source has failed to meet an applicable emission limit or standard or that a work practice was not complied with or completed. (2) If no deviation event occurred during the reporting period, a statement that indicates there were no deviations from the permit requirements shall be included in the report. (b) The report shall include the requirements specified in Proviso 2(b)(1) through (11) for each deviation event.	Rule 335-3-16-.05(c)3 40 CFR §64.9(a)

PROVISOS FOR HP/LP PROCESS FLARE

Federally Enforceable Provisos	Regulations
(1) Emission source description (2) Permit requirement (3) Date (4) Starting time (5) Duration (6) Actual quantity (7) Cause (8) Action taken to return to compliance (9) Total operating hours of the affected source during the reporting period (10) Total hours of deviation events during the reporting period (11) Total hours of deviation events that occurred during startups, shutdowns, and malfunctions during the reporting period	
(c) The PMR shall cover a calendar semi-annual period and shall be submitted to the Department on the following reporting schedule: **Reporting Period** — **Submittal Date** January 1-June 30 — July 31 July 1- December 31 — January 31	
3. Each deviation from the requirements specified in this permit, including those that occur during startups, shutdowns, and malfunctions, shall be reported to the Department in a manner that complies with General Permits Provisos 15(b) and 21(b).	Rule 335-3-16-.05(c)3 40 CFR §64.7(d)(2)

[THIS PAGE LEFT BLANK INTENTIONALLY]

SUMMARY PAGE FOR RECIPROCATING COMPRESSOR

Permitted Operating Schedule†: **24** Hours/Day x **365** Days/Year = **8,760** Hours/Year
† Except during leap year, Permitted Operating Schedule = **8,784** Hours/Year

Emission Limitations:

EMISSION POINT	DESCRIPTION	POLLUTANT	EMISSION LIMIT/STANDARD	REGULATIONS
Electric Driven Reciprocating Compressor (COMP1)		VOC	Work Practice Standards: Replace compressor rod packing	40 CFR §60.5365(c) Subpart OOOO [NSPS OOOO]

PROVISOS FOR RECIPROCATING COMPRESSOR

Federally Enforceable Provisos	Regulations
Applicability	
1. The reciprocating compressor is subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, "Major Source Operating Permits".	Rule 335-3-16-.03
2. The reciprocating compressor is an affected facility subject to the applicable requirements of 40 CFR Part 60, Subpart OOOO, "*Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015"* [NSPS OOOO].	Rule 335-3-10-.02(91) 40 CFR §60.5360 40 CFR §60.5365(c)
3. The reciprocating compressor is subject to the applicable requirements of 40 CFR Part 60 Subpart A, *"General Provisos"* [Subpart A], as provided in Table 3 of 40 of NSPS OOOO.	Rule 335-3-10-.02(1) 40 CFR §60.5425 Table 3, NSPS OOOO
Emission Standards	
1. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate the reciprocating compressor, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.	40 CFR §60.5370(b)
2. The Permittee shall meet one of the following standards to comply with NSPS OOOO:	
(a) Prior to thirty-six (36) months from the date of the most recent rod packing replacement, replace the compressor rod packing.	40 CFR §60.5385(a)(2)
(b) Nothing in the permit shall preclude the Permittee from complying with any other applicable standards under this subpart provided that the Department receives prior notification.	40 CFR §60.5385(a)
Emission Monitoring	
1. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Department which may include but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.	40 CFR §60.5370(b)
2. The Permittee has elected to comply with the requirements in NSPS OOOO for the reciprocating compressor by conducting the following monitoring:	
(a) Track the number of months since the date of the most recent reciprocating compressor rod packing replacement.	40 CFR §60.5415(c)(1)

PROVISOS FOR RECIPROCATING COMPRESSOR

Federally Enforceable Provisos	Regulations
(b) Replace the reciprocating compressor rod packing before the number of months since the most recent rod packing replacement reaches 36 months.	40 CFR §60.5415(c)(3)
Compliance and Performance Test Methods and Procedures	
1. Since the reciprocating compressor is demonstrating compliance with NSPS OOOO by complying with 40 CFR §60.5385(a)(2), no testing is required for this unit.	40 CFR §60.5385(a)(2)
Record Keeping and Reporting Requirement	
1. The following records shall be maintained to demonstrate compliance with the requirements in NSPS OOOO for the reciprocating compressor:	40 CFR §60.5415(c)(2) 40 CFR §60.5420(c)
(a) Records required in 40 CFR §60.7(f), if applicable.	40 CFR §60.5420(c)
(b) Records of the cumulative number of months since the previous replacement of the reciprocating compressor rod packing.	40 CFR §60.5420(c)(3)(i)
(c) Records of the date and time of each reciprocating compressor rod packing replacement.	40 CFR §60.5420(c)(3)(ii)
(d) Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in 40 CFR §60.5385.	40 CFR §60.5420(c)(3)(iii)
(e) All records required by NSPS OOOO must be maintained either onsite or at the nearest local field office for at least five (5) years.	40 CFR §60.5420(c)(3)
2. An annual report, containing the applicable information specified in Provisos 2(a) and (b) below must be submitted to the Department **no later than January 13th each year** to comply with the reporting requirements under NSPS OOOO:	40 CFR §60.5415(c)(2) 40 CFR §60.5420(b)
(a) The general information specified in 40 CFR §60.5420(b)(1) .	40 CFR §60.5420(b)(1)
(b) The information for reciprocating compressors specified in 40 CFR §60.5420(b)(4):	40 CFR §60.5420(b)(4)
(1) The cumulative number of months since the previous reciprocating compressor rod packing replacement.	40 CFR §60.5420(b)(4)(i)
(2) Records of deviations specified in Proviso 1(d) of this section that occurred during the reporting period.	40 CFR §60.5420(b)(4)(ii)

PROVISOS FOR RECIPROCATING COMPRESSOR

Federally Enforceable Provisos	Regulations
(c) Annual Reports may coincide with Title V reports as long as all the required elements of the annual report are included.	40 CFR §60.5420(b)
(d) A common schedule on which reports may be submitted can be arranged as long as the schedule does not extend the reporting period.	40 CFR §60.5420(b)
3. Each deviation from the requirements specified in this Permit, including those that occur during startups, shutdowns, and malfunctions, shall be reported to the Department in a manner that complies with General Permit Provisos 15(b) and 21(b).	Rule 335-3-16-.05(c)3.

SUMMARY PAGE FOR STORAGE VESSELS

Permitted Operating Schedule[†]**:** **24** Hours/Day x **365** Days/Year = **8,760** Hours/Year
[†] Except during leap year, Permitted Operating Schedule = **8,784** Hours/Year

Emission Limitations:

EMISSION POINT	DESCRIPTION	POLLUTANT	EMISSION LIMIT/STANDARD	REGULATIONS
Affected storage vessels:		VOC	Work practice standards:	Rule 335-3-16-.05(c)1
16,800 Gallon (4,000 Barrel) Produced Water Storage Tank (EU T6000)			Route tank vapors to the flare for combustion	
11,760 Gallon (280 Barrel) Gun Barrel Storage Tank (EU T6100)			Complete monthly AVO inspections of CVS and tanks	
4,200 Gallon (100 Barrels) Slop Oil Storage Tank (EU T6200)				
Pressurized Condensate Storage Tank				

PROVISOS FOR STORAGE VESSELS

Federally Enforceable Provisos	Regulations
Applicability	
1. Affected storage vessels listed on the summary page are subject to the applicable requirements of ADEM Admin. Code r. 335-3-16-.03, "*Major Source Operating Permits*".	Rule 335-3-16-.03
Emission Standards	
1. All gases, vapors, and fumes emitted from the material stored in an affected storage vessels shall be captured in a closed vent system (CVS) and routed to the facility's HP/LP process flare for combustion or routed to a process.	Rule 335-3-16-.05(a)
2. The CVS must be designed and operated with no detectable emission.	Rule 335-3-16-.05(a)
Emission Monitoring	
1. Auditory, visual, and olfactory (AVO) inspections shall be conducted to determine defects that could result in air emissions. (a) Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connection, liquid leaks, or broken or missing caps or other closure devices. (b) AVO inspections shall be conducted on the affected storage vessels at least once every calendar month (c) Monthly inspections must be separated by at least 14 calendar days	Rule 335-3-16-.05(c)1
2. Provided that a leak or defect is detected during the monthly AVO inspection repairs, shall be made as soon as practicable, as follows, except when there is a delay of repair (DOR): (a) The first attempt at repair must be made no later than five (5) calendar days after the leak or defect is detected. (b) Repair must be completed by no later than 30 calendar days after the leak or defect is detected. (c) Grease or another applicable substance must be applied to deteriorating or cracked gaskets to improve the seal while awaiting repair.	Rule 335-3-16-.05(c)1
3. Delay of repair of a CVS for which leaks or defects have been detected is allowed if the following occurs if:	Rule 335-3-16-.05(c)1

PROVISOS FOR STORAGE VESSELS

Federally Enforceable Provisos	Regulations
(a) Repair is technically infeasible without a shutdown, or it is determined that emissions resulting from the immediate repair would be greater than the fugitive emission likely to result from the delay or repair.	
(b) Repair of such equipment is completed by the end of the next shutdown	
4. Any parts of the CVS may be designated as unsafe to inspect, if the following requirements are met:	Rule 335-3-16-.05(c)1
(a) Equipment is determined to be unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of conducting monthly AVO inspections.	
(b) A written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times exists.	
(c) Unsafe to inspect parts are exempt monthly AVO inspections.	
5. Any parts of the CVS mya be designated difficult to inspect if the following requirements are met:	Rule 335-3-16-.05(c)1
(a) It if is determined that the equipment cannot be inspected without elevating inspecting personnel more than 2 meters above a support surface.	
(b) There is a written plan that requires inspection of the equipment at least once every five (5) years.	
Compliance and Performance Test Methods and Procedures	
1. AVO inspections shall be conducted on the affected storage vessels using the methods specified in the emission monitoring section of this subpart.	Rule 335-3-16-.05(c)1(ii)
Record Keeping and Reporting Requirement	
1. The following records shall be maintained for the storage vessels:	
(a) A record of each occurrence when vapors from the storage vessels were not routed to the flare for combustion.	Rule 335-3-16-.05(c)2
(b) A record of the monthly AVO inspections results for the closed vent system (CVS) and storage vessels.	Rule 335-3-16-.05(c)2

PROVISOS FOR STORAGE VESSELS

Federally Enforceable Provisos		Regulations
2.	Retention of records of all required monitoring data and support information of the source for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application shall be maintained.	Rule 335-3-16-.05(c)2(ii)
3.	Each deviation from the requirements specified in this Permit, including those that occur during startups, shutdowns, and malfunctions, shall be reported to the Department in a manner that complies with General Permit Provisos 15(b) and 21(b).	Rule 335-3-16-.05(c)3

APPENDIX A- PROCESS FLARE MONITORING

PROCESS FLARE MONITORING

Monitoring approach:	*Periodic Monitoring*	*Compliance Assurance Monitoring (CAM)*
I. Indicator	**H_2S feed rate**	**Operate process flare with a flame or spark present at all times when a process gas stream can be routed to the flare**
A. Measurement approach	Inlet feed volume shall be monitored with a system capable of measuring and recording the flow rate and/or the parameters utilized for flow rate calculation or estimated utilizing material balances, computer simulations, special testing, etc.	The flare tip shall be equipped either with a continuous sparking flame igniter that is monitored by an amp meter or an equivalent device OR Equipped with a continuously burning pilot light that is monitored with either a thermocouple or an equivalent device OR A daily visual inspection of the flare shall be conducted to determine the presence or absence of a spark or flame at the flare tip
II. Indicator range	**H_2S feed rate of less than or equal to 500 lbs/hr** A deviation is defined as anytime the daily H_2S feed rate is greater than 500 lbs/hr A deviation triggers an immediate inspection, corrective action, and reporting within 48 hours or two workdays	**Presence of a flame or spark at flare tip** A deviation is defined as when there was no spark or flame present at the flare tip when a process gas stream could be vented to it A deviation triggers an immediate inspection, corrective action, and reporting within 48 hours or two workdays
A. QIP threshold	Not applicable	If more than six (6) deviations occur during any semi-annual reporting period, a Quality Improvement Plan (QIP) shall be developed and implemented
III. Performance criteria		
A. Data representativeness	Each volume monitor shall be located upstream of the process flare and shall consist of a single device that monitors all streams or multiple devices that monitor individual or multiple streams. The volume sensor shall be accurate to within 2% of span or 5% of design flow rate The sample point for H_2S content shall be located downstream of where the various gas processing streams combine prior to entry into the process flare.	Each flame igniter or flame monitor shall be located at the flare tip and focused on the area where gas exits the flare tip Visual inspections shall be made from the location that provides the best view of the flare tip and/or flare pilot lights or flare igniter
B. Verification of operational status	Not applicable	Not applicable

PROCESS FLARE MONITORING

Monitoring approach:	***Periodic Monitoring***	***Compliance Assurance Monitoring (CAM)***
C. QA/QC practices & criteria	Each volume monitor shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent	Each flame igniter or flame monitor shall be maintained and calibrated in accordance with the manufacturer's specifications, other written procedures that provide adequate assurance that the device is properly maintained and calibrated accurately, or at least annually, whichever is more frequent
	If the monitor fails its calibration tests, the monitor shall be taken out of service until repairs and/or replacements are made and a new calibration test is undertaken and passed	Repairs and/or replacements shall be made immediately when non-functioning or damaged parts are found
		Flame igniter arc length shall not exceed 10% of arc interval and shall have an arcing frequency of no greater than once every 3 seconds
D. Monitoring frequency	Inlet volume measured continuously	Pilot flame shall be monitored either continuously with a thermocouple or by performing a daily visual inspection of the flare when process gas is being sent to it for combustion
		Flame igniter arcing frequency shall be monitored either continuously with an amp meter or by performing a daily visual inspection of the flare when process gas is being sent to it for combustion
Data collection procedure	Calculate &/or record an inlet volume that is representative of the average daily volume entering the process flare	Record time, date and duration of each incident when no spark or flame was present at the flare tip and when a process gas stream other than the flare pilot could have been sent to the flare and corrective actions taken
	Record daily hours of operation for the process flare	Record time, date and results of each daily visual inspection of the flare for presence or absence of spark of flame
	Record each H_2S concentration analysis	Record time, date and results of each calibration
	Calculate & record H_2S and SO_2 emissions monthly	Record time, date and results of each inspection and corrective actions taken
	Record calibration results	
	Record inspection results, corrective and actions taken	
Averaging period	24 hours	Daily

[THIS PAGE LEFT BLANK INTENTIONALLY]

APPENDIX B-OPACITY MONITORING FOR PROCESS FLARE

OPACITY MONITORING FOR FACILITY FLARE

Monitoring approach:	*Periodic Monitoring*
I. Indicator	**Opacity**
A. Measurement approach	If the facility flare is being utilized to burn a gas stream other than the pilot light fuel gas stream, a daily visual inspection of the flare shall be conducted to determine the presence or absence of visible emissions. The flare shall be monitored using a camera to determine the presence or absence of emissions, but not to determine opacity, OR by manually conducting a visual inspection of the flare. If at any time visible emissions occur in excess of the opacity standards OR if any smoke emissions are observed from the flare, a visual emission observation (VEO) OR a visual smoke determination shall be undertaken to determine opacity or to determine the duration of smoke emissions from the flare. The VEO or visual smoke determination shall be conducted as follows: Duration of each VEO shall be ≥ 15 minutes AND ≤ 120 minutes Duration for each visual smoke determination shall be at least 12 minutes Each observation shall be conducted in accordance with either: Test Method 9 of 40 CFR Part 60, Appendix A-4 (this method should be conducted by an observer that is certified using this method) OR Test Method 22 of 40 CFR Part 60, Appendix A-7 (this method should be conducted by an observer familiar with this method and its procedure) Each visual inspection, VEO, and visual smoke emission determination must be conducted during daylight hours.
II. Indicator range	**No 6-minute average particulate of an opacity > 20%; except for during one 6-minute average in a 60-minute period can particulate of an opacity be >20% but ≤ 40%** **AND** **No 6-minute average particulate of an opacity > 40%** **OR** **The accumulated time that any smoke emissions can be observed from the flare shall not exceed 6 minutes** A deviation is defined as anytime the observed 6-minute average opacity exceeds 20% for the 2nd time when utilizing Method 9. A deviation is defined as anytime the observed 6-minute average opacity exceeds 40% for the 1st time when utilizing Method 9. A deviation is defined as anytime the accumulated time in which smoke emissions were observed exceeds 6 minutes per observation when utilizing Method 22. A deviation triggers an immediate inspection, corrective action, and reporting within 48 hours or two workdays. After corrective action is completed, an additional VEO or visual smoke determination shall be conducted to confirm that the flare is in compliance with the opacity standards.
A. QIP threshold	Not applicable
III. Performance criteria	
A. Monitoring frequency	Daily visual inspection of the flare; each occurrence of a VEO conducted or visual smoke determination
Data collection procedure	Record: Time, date and results of each manual visual inspection of the flare Each 15-second observation reading when a VEO is conducted Each 6-minute observation period in which smoke emissions are observed from the flare Time, date, and results of corrective actions taken when a VEO is conducted
Averaging period	Six minutes