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**AIR QUALITY BUREAU
NEW SOURCE REVIEW PERMIT
Issued under 20.2.72 NMAC**

Certified Mail No:7015 1520 0001 8091 1728
Return Receipt Requested

Proposed 4/11/22

NSR Permit No: 7638-M2
Facility Name: Eagle Compressor Station

Permittee Name: XTO Energy, Inc.
Mailing Address: 22777 Springwoods Village Parkway
W4-6B-357
Spring, TX 77389

TEMPO/IDEA ID No: 38232- PRN20200001
AIRS No: 35-015-1863

Permitting Action: Regular – Significant Revision
Source Classification: Title V Major – PSD Synthetic Minor

Facility Location: 608,132 m E by 3,553,321 m N, Zone 13;
Datum NAD83

County: Eddy County

Air Quality Bureau Contact Joseph Kimbrell
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Date

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PART A FACILITY SPECIFIC REQUIREMENTS**A100 Introduction**

- A. This permit, NSR 7638-M2, supersedes all portions of Air Quality Permit 7638-R1, issued February 6, 2019, except portions requiring compliance tests. Compliance test conditions from previous permits, if not completed, are still in effect, in addition to compliance test requirements contained in this permit.

A101 Permit Duration (expiration)

- A. The term of this permit is permanent unless withdrawn or cancelled by the Department.

A102 Facility: Description

- A. The function of the facility is to separate oil, natural gas, and water from a nearby pipeline; temporarily store condensate onsite until it is removed via truck or pipeline; and compress dehydrated natural gas for transport through the sales line.
- B. This facility is located approximately 14.8 miles SE of Malaga in Eddy County, NM.
- C. The description of this modification is for informational purposes only and is not enforceable. This modification consists of the following:
 - (1) Remove HTR2 and HTR3;
 - (2) Remove ENG10 and ENG13;
 - (3) Increase glycol circulation rate for DEHY1-3 from 6.8 gpm to 27.6 gpm;
 - (4) Decrease glycol regenerator reboiler (RB1-RB3) unit heat input from 3 MMBtu/hr to 2.0 MMBtu/hr;
 - (5) Increase Dehy SSM from 200 hrs to 300 hrs
 - (6) Increase flare purge gas rates;
 - (7) Update FL1-FL3 heights to 145’;
 - (8) Update tank throughputs;
 - (9) Decrease condensate truck loading;
 - (10) Add inlet gas flaring;
 - (11) Increasing steady state flaring associated with increased tank throughput and glycol circulation rate; update sources that vent to flare.

- (12) Update ENG1-9 and ENG11-12 VOC/formaldehyde/CO control efficiencies and update emissions factors from Caterpillar Gas Engine Rating Pro (GERP) analysis.
- (13) Update nomenclature of GB1a and GB2a to SKT1 and SKT2.
- (14) Update facility location coordinates
- (15) Update low-pressure separator pressure from 2 psig to 16 psig.
- (16) Added VOC malfunction emissions
- (17) Added vapor recovery units VRU1 and VRU2 controlling emissions from the low-pressure separator.

D. Tables 102.A and Table 102.B show the total potential emission rates (PER) from this facility for information only. This is not an enforceable condition and excludes emissions from Minor NSR exempt activities per 20.2.72.202 NMAC.

Table 102.A: Total Potential Emission Rate (PER) from Entire Facility

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NO _x)	182.8
Carbon Monoxide (CO)	238.3
Volatile Organic Compounds (VOC) *	198.4
Sulfur Dioxide (SO ₂)	20.3
Particulate Matter (PM)	17.9
Particulate Matter 10 microns or less (PM ₁₀)	17.7
Particulate Matter 2.5 microns or less (PM _{2.5})	17.7
Greenhouse Gas (GHG) as CO ₂ e	242,014

* VOC total includes emissions from Fugitives and SSM and Malfunctions.

Table 102.B: Total Potential Emissions Rate (PER) for *Hazardous Air Pollutants (HAPs) that exceed 1.0 ton per year

Pollutant	Emissions (tons per year)
Acetaldehyde	5.3
Benzene	1.4
n-Hexane	3.7
Formaldehyde	25.5
Total HAPs **	38.6

* HAP emissions are already included in the VOC emission total.

** The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 1.0 tons per year are listed here.

A103 Facility: Applicable Regulations

- A. The permittee shall comply with all applicable sections of the requirements listed in Table 103.A.

Table 103.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
20.2.1 NMAC General Provisions	X	Entire Facility
20.2.3 NMAC Ambient Air Quality Standards	X	Entire Facility
20.2.7 NMAC Excess Emissions	X	Entire Facility
20.2.38 NMAC Hydrocarbon Storage Facility	X	OT1, OT2, OT3, OT4
20.2.61 NMAC Smoke and Visible Emissions	X	ENG1-9, ENG11, ENG12, FL1, FL2, FL3, RB1, RB2, RB3, HTR1
20.2.70 NMAC Operating Permits	X	Entire Facility
20.2.71 NMAC Operating Permit Emission Fees	X	Entire Facility
20.2.72 NMAC Construction Permit	X	Entire Facility
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	X	Entire Facility
20.2.75 NMAC Construction Permit Fees	X	Entire Facility
20.2.77 NMAC New Source Performance	X	Units subject to 40 CFR 60
20.2.82 NMAC MACT Standards for Source Categories of HAPS	X	Units subject to 40 CFR 63
40 CFR 50 National Ambient Air Quality Standards	X	Entire Facility
40 CFR 60, Subpart A, General Provisions	X	Units subject to 40 CFR 60
40 CFR 60, Subpart JJJJ	X	ENG1-9, ENG11, ENG12 (TBD) ^{1,2}
40 CFR 60, Subpart OOOOa	X	FUG, Compressors for ENG1-9, ENG11, ENG12 (TBD) ²
40 CFR 63, Subpart A, General Provisions	X	Units subject to 40 CFR 63
40 CFR 63, Subpart HH	X	DEHY1-DEHY3
40 CFR 63, Subpart ZZZZ	X	ENG1-9, ENG11, ENG12 (TBD) ¹

¹ All TBD engines require review of the applicability of 40 CFR 60, Subpart JJJJ; and 40 CFR 63, Subpart ZZZZ by the permittee when each potentially affected unit is ordered.

² The TBD compressors require review of the applicability of 40 CFR 60, Subpart OOOOa by the permittee when each potentially affected unit is ordered.

A104 Facility: Regulated Sources

- A. Table 104.A lists the emission units authorized for this facility. Emission units identified as exempt activities (as defined in 20.2.72.202 NMAC) and/or equipment not regulated pursuant to the Act are not included.

Table 104.A: Regulated Sources List

Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Permitted Capacity
LOAD2	Water Truck Loading	N/A	N/A	N/A	N/A	N/A	521 BWPD
FUG	Fugitive Emissions	N/A	N/A	N/A	N/A	N/A	N/A
SSM	SSM Activities	N/A	N/A	N/A	N/A	N/A	N/A
VRU1	Vapor Recovery Unit	N/A	N/A	N/A	N/A	N/A	125 hp
VRU2	Vapor Recovery Unit Backup	N/A	N/A	N/A	N/A	N/A	125 hp
FL1-FL3 SSMs	SSM Flaring	TBD	N/A	N/A	TBD	TBD	70 MMscf/d
DEHY1-DEHY3 SSM	Condenser Vapors to reboiler	N/A	N/A	N/A	N/A	N/A	N/A
MALF	VOC Malfunction Emissions	N/A	N/A	N/A	N/A	N/A	N/A
HTR1	Auxiliary Heater	TBD	N/A	N/A	TBD	TBD	0.75 MMBtu/hr

1. All TBD (to be determined) units and like-kind engine replacements must be evaluated for to NSPS and MACT applicability
2. Only one skim tank may operate at any given time.
3. Flare Notes: Each flare (Units FL1, FL2, and FL3) is a dual pressure flare capable of accommodating high pressure and low pressure. The facility’s total gas produced can be sent to any flare (Units FL1, FL2, FL3) or a portion can be sent to each flare simultaneously. Any of the flares (Units FL1, FL2, FL3) can flare gas in the case of an emergency.

A105 Facility: Control Equipment

- A. Table 105.A lists all the pollution control equipment required for this facility. Each emission point is identified by the same number that was assigned to it in the permit application.

Table 105.A: Control Equipment List:

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit Number(s) ¹
FL1	Dual Tip Flare	VOC, HAP	SSM Activities (including HP flare blowdowns, flash tank vapors, LPS during VRU downtime, and HP flare inlet gas), DEHY1-3, OT1-OT4, SKT1, SKT2
FL2	Dual Tip Flare	VOC, HAP	SSM Activities (including HP flare blowdowns, flash tank vapors, LPS during VRU downtime, and HP flare inlet gas), DEHY1-3, OT1-OT4, SKT1, SKT2

Table 105.A: Control Equipment List:

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit Number(s) ¹
FL3	Dual Tip Flare	VOC, HAP	SSM Activities (including HP flare blowdowns, flash tank vapors, LPS during VRU downtime, and HP flare inlet gas) , DEHY1-3, OT1-OT4, SKT1/SKT2
COND1-3	Condenser	VOC, HAP	DEHY1-3
RB1-RB3	Glycol Regenerator Heater	VOC, HAP	DEHY1-3 SSM(COND1-3 Vapors)
CAT1-9, CAT11-12	Oxidative Catalysts	CO, VOC, HAP	ENG1-9, ENG11-12
VRU1	Vapor Recovery Unit	VOC, HAP	LPS
VRU2	Vapor Recovery Unit Back-up	VOC, HAP	LPS

1. Control for unit number refers to a unit number from the Regulated Equipment List

A106 Facility: Allowable Emissions

A. The following Section lists the emission units and their allowable emission limits. (40 CFR 50; 40 CFR 60, Subparts A, JJJJ, and OOOOa; 40 CFR 63, Subparts A, HH, ZZZZ; 20.2.72.210.A and B.1 NMAC).

Table 106.A: Allowable Emissions

Unit No.	NO _x ¹ pph	NO _x ¹ tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO ₂ pph	SO ₂ tpy
ENG1	4.1	14.5	4.8	16.8	1.7	5.9	0.5	1.9
ENG2	4.1	14.5	4.8	16.8	1.7	5.9	0.5	1.9
ENG3	4.1	14.5	4.8	16.8	1.7	5.9	0.5	1.9
ENG4	4.1	14.5	4.8	16.8	1.7	5.9	0.5	1.9
ENG5	4.1	14.5	4.8	16.8	1.7	5.9	0.5	1.9
ENG6	4.1	14.5	4.8	16.8	1.7	5.9	0.5	1.9
ENG7	4.1	14.5	4.8	16.8	1.7	5.9	0.5	1.9
ENG8	4.1	14.5	4.8	16.8	1.7	5.9	0.5	1.9
ENG9	4.1	14.5	4.8	16.8	1.7	5.9	0.5	1.9
ENG11	1.9	6.7	1.2	4.0	1.0	2.5	⁶ <	<
ENG12	1.9	6.7	1.2	4.0	1.0	2.5	<	<

Table 106.A: Allowable Emissions

Unit No.	NO _x ¹ pph	NO _x ¹ tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO ₂ pph	SO ₂ tpy
FL1, FL2, FL3 ^{2,3}	4.4	14.9	8.7	36.1	19.0	46.5	0.3	1.34
LPS	5 _.	-	-	-	0	0	-	-
SKT1 SKT2	-	-	-	-	0	0	-	-
OT1	-	-	-	-	0	0	-	-
OT2	-	-	-	-	0	0	-	-
OT3	-	-	-	-	0	0	-	-
OT4	-	-	-	-	0	0	-	-
WT1	-	-	-	-	0	0	-	-
WT2	-	-	-	-	0	0	-	-
DEHY1	-	-	-	-	0	0	-	-
DEHY2	-	-	-	-	0	0	-	-
DEHY3	-	-	-	-	0	0	-	-
RB1	<	1.3	<	1.1	<	<	<	<
RB2	<	1.3	<	1.1	<	<	<	<
RB3	<	1.3	<	1.1	<	<	<	<
LOAD	-	-	-	-	* ⁷	9.9	-	-
LOAD2	-	-	-	-	*	<	-	-
HTR1	<	<	<	<	<	<	<	<

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO₂.

2 Low Pressure flare emissions are from low pressure flare pilots on Units FL1B, FL2B, and FL3B, low pressure vapors from oil tanks (Units OT1-OT4) and the skim tank (Unit SKT1 or Unit SKT2), and the uncondensed vapors from the dehydrator condenser. All flare emissions can be routed to one or all of the flares.

3 The emission limits for the flares are a combined total for all flares and these limits are the total allowable emissions, except for SSMs.

4 To report excess emissions for sources with no pound per hour and/or ton per year emission limits, see condition B110F.

5 “-” indicates the application represented emissions are not expected for this pollutant.

6 “<” indicates that the application represented the uncontrolled mass emission rates are less than 1.0 pph or 1.0 tpy for this emissions unit and this air pollutant. The Department determined that allowable mass emission limits were not required for this unit and this pollutant.

7 “*” indicates hourly emission limits are not appropriate for this operating situation.

A107 Facility: Allowable Startup, Shutdown, & Maintenance (SSM)

A. The maximum allowable SSM emission limits for this facility are listed in Table 107.A and were relied upon by the Department to determine compliance with applicable regulations.

Table 107.A: Allowable SSM and Malfunction Units, Activities, and Emission Limits

Unit No.	Description	NO _x ¹ pph	NO _x ¹ tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO ₂ pph	SO ₂ tpy	PM ₁₀ , 2.5 pph	PM ₁₀ , 2.5 tpy
Venting											
SSM	Misc SSM ²	-	-	-	-	-	10.0	-	-	-	-
MALF	Venting of Gas Due to Malfunction	-	-	-	-	-	10.0	-	-	-	-
Combustion ³											
SSM	SSM Flaring	526.2	19.7	1,050.4	39.3	855.6	35.0	5.0	0.2	22.3	0.8
DEHY1 SSM ⁴	COND1 Vapors to reboiler	<	<	<	<	24.33	2.13	<	<	<	<
DEHY2 SSM ⁴	COND2 Vapors to reboiler	<	<	<	<	24.33	2.13	<	<	<	<
DEHY3 SSM ⁴	COND3 Vapors to reboiler	<	<	<	<	24.33	2.13	<	<	<	<

- ¹ Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO₂.
- ² Specific SSM emissions include small equipment blowdowns, tank emptying and refilling, and miscellaneous activities.
- ³ Applicant has requested combined emission limits for SSM gas that can be routed to any of the three flares.
- ⁴ Condenser vapors can be routed to the reboiler (RB1 - RB3)
- ⁵ To report excess emissions for sources with no pound per hour and/or ton per year emission limits, see condition B110F.

B. The authorization of emission limits for startup, shutdown, maintenance, and malfunction does not supersede the requirements to minimize emissions according to General Conditions B101.F and B107. A.

C. SSM Emissions (Unit SSM: SSM Activities)

Requirement: The permittee shall perform a facility inlet gas analysis once every year based on a calendar year and complete the following recordkeeping to demonstrate compliance with routine and predictable startup, shutdown, and maintenance (SSM) emission limits in Table 107.A.

Monitoring: The permittee shall monitor the permitted routine and predictable startups and shutdowns and scheduled maintenance events.

Recordkeeping:

- (1) To demonstrate compliance, each month records shall be kept of the cumulative total of VOC emissions during the first 12 months and, thereafter of the monthly rolling 12-month total VOC emissions.
- (2) Records shall also be kept of the inlet gas analysis, the percent VOC of the gas based on the most recent gas analysis, and of the volume of total gas vented in MMscf used to calculate the VOC emissions.
- (3) The permittee shall record the demonstrated compliance in accordance with Condition B109, except the requirement in B109.C to record the start and end times of SSM events shall not apply to the venting of known quantities of VOC .

Reporting: The permittee shall report in accordance with Section B110.

- D. SSM Flaring (SSM activities including HP flare blowdowns, flash tank vapors, control for LPS during VRU downtime, and HP flare inlet gas)

Requirement: Compliance with routine or predictable startup, shutdown, and maintenance (SSM) emission limits in Table 107.A shall be demonstrated by operating the flares in accordance with the requirements of Condition A206.A of this permit and completing monitoring and recordkeeping as specified below.

Emissions Due to Preventable Events

Emissions that are due entirely or in part to poor maintenance, careless operation, or any other preventable equipment breakdown shall not be included under SSM emissions limits. These emissions shall be reported as excess emissions in accordance with 20.2.7.110 NMAC.

Monitoring: The permittee shall monitor the date, time, cause and duration of routine or predictable startup, shutdown, and scheduled maintenance events.

Recordkeeping: The permittee shall maintain records of all calculations and parameters used to determine emission rates in spreadsheet format and in accordance with Condition B109.

(1) Hourly Emissions Calculations: The permittee shall calculate the pph NO_x, CO, VOC, SO₂, PM₁₀, and PM_{2.5} emission rates for each hour of each SSM event using these parameters:

- (a) the calculated average hourly flow rate of all gas combusted by the flare, including pilot, purge, and assist gas, if applicable, from Condition A206.A;
- (b) Gas Analysis including total sulfur content, VOC content, and heating value (BTU/scf) of the gas from Condition A206.A;
- (c) the emission factors represented in the permit application and approved by the Department, for NO_x, CO, SO₂, PM₁₀, and PM_{2.5} emission rates; and

(d) VOC emission rates calculated using the destruction efficiency represented in the permit application and approved by the Department.

(2) Annual Emissions Calculations: The permittee shall calculate the total tpy SSM emission rates as a monthly-rolling 12-month total, using the pph emission rates for each hour of the month as follows:

(a) Monthly, during the first 12 months of this condition taking effect, the permittee shall record the cumulative total tons of NO_x, CO, VOC, SO₂, PM₁₀, and PM_{2.5} emissions,

(b) After the first 12 months of this condition taking affect, the permittee shall record the monthly -rolling 12-month total tpy NO_x, CO, VOC, SO₂, PM₁₀, and PM_{2.5} emissions.

(3) SSM Events: The permittee shall retain monitoring records, including the date, time, and duration of each SSM event, as well as a description of the event including maintenance performed.

Reporting: The permittee shall report in accordance with Condition B110.

E. Malfunction Emissions (Unit MALF)

Requirement: The permittee shall perform a facility inlet gas analysis once every year based on a calendar year and complete the following recordkeeping to demonstrate compliance with malfunction (M) emission limits in Table 107.A.

Monitoring: The permittee shall monitor all malfunction events that result in VOC emissions including identification of the equipment or activity that is the source of emissions.

Recordkeeping:

(1) To demonstrate compliance, each month records shall be kept of the cumulative total of VOC emissions due to malfunction events during the first 12 months and, thereafter of the monthly rolling 12-month total VOC emissions due to malfunction events.

(2) Records shall also be kept of the inlet gas analysis, the percent VOC of the gas based on the most recent gas analysis, of the volume of total gas vented in MMscf used to calculate the VOC emissions, and whether the emissions resulting from the event will be used toward the permitted malfunction emission limit or whether the event is reported as excess emissions of the pound per hour limits in Table 106.A (or the pound per hour limits in condition B110F, if applicable), under 20.2.7 NMAC.

(3) The permittee shall record the demonstrated compliance in accordance with Condition B109, except the requirement in B109.C to record the start and end times of malfunction events shall not apply to the venting of known quantities of VOC.

Reporting: The permittee shall report in accordance with Section B110.

F. DEHY1 – DEHY3 (Condenser Vapors COND1-3) SSM

Requirement: To demonstrate compliance with the allowable emission limits in Table 107.A, the condenser vapors may be routed to the dehydrator reboilers (RB1-RB3) for combustion for

up to 300 hours per year, combined for all three reboilers.
Monitoring: The permittee shall monitor manually, or electronically, the number of hours the condenser vapors are routed and combusted in the reboilers each calendar year.
Recordkeeping: The permittee shall keep records of the number of hours the condenser vapors are routed and combusted in the reboilers each calendar year, and shall meet the recordkeeping requirements in Section B109.
Reporting: The permittee shall report in accordance with Section B110.

A108 Facility: Allowable Operations

- A. This facility is authorized for continuous operation. Monitoring, recordkeeping, and reporting are not required to demonstrate compliance with continuous hours of operation.

A109 Facility: Reporting Schedules

- A. The permittee shall report according to the Specific Conditions and General Conditions of this permit.

A110 Facility: Fuel and Fuel Sulfur Requirements

- A. Fuel and Fuel Sulfur Requirements

Requirement: All combustion emission units shall combust only natural gas containing no more than 4.0 grains of total sulfur per 100 dry standard cubic feet.
Monitoring: No monitoring is required. Compliance is demonstrated through records.
Recordkeeping: <ol style="list-style-type: none"> (1) The permittee shall demonstrate compliance with the natural gas or fuel oil limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous or liquid fuel, or fuel gas analysis, specifying the allowable limit or less. (2) If fuel gas analysis is used, the analysis shall not be older than one year. (3) Alternatively, compliance shall be demonstrated by keeping a receipt or invoice from a commercial fuel supplier, with each fuel delivery, which shall include the delivery date, the fuel type delivered, the amount of fuel delivered, and the maximum sulfur content of the fuel.
Reporting: The permittee shall report in accordance with Section B110.

A111 Facility: 20.2.61 NMAC Opacity**A. 20.2.61 NMAC Opacity Limit (Units ENG1-9, ENG11-12, RB1-RB3, HTR1)**

Requirement: Visible emissions from all stationary combustion emission stacks shall not equal or exceed an opacity of 20 percent in accordance with the requirements at 20.2.61.109 NMAC.

Monitoring:

- (1) Use of natural gas fuel constitutes compliance with 20.2.61 NMAC unless opacity equals or exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during operation other than during startup mode, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Reference Method 9 (EPA Method 9) as required by 20.2.61.114 NMAC, or the operator will be allowed to shut down the equipment to perform maintenance/repair to eliminate the visible emissions. Following completion of equipment maintenance/repair, the operator shall conduct visible emission observations following startup in accordance with the following procedures:
- (a) Visible emissions observations shall be conducted over a 10-minute period during operation after completion of startup mode in accordance with the procedures at 40 CFR 60, Appendix A, Reference Method 22 (EPA Method 22). If no visible emissions are observed, no further action is required.
 - (b) If any visible emissions are observed during completion of the EPA Method 22 observation, subsequent opacity observations shall be conducted over a 10-minute period, in accordance with the procedures at EPA Method 9 as required by 20.2.61.114 NMAC.

For the purposes of this condition, *Startup mode* is defined as the startup period that is described in the facility's startup plan.

Recordkeeping:

- (1) If any visible emissions observations were conducted, the permittee shall keep records in accordance with the requirements of Section B109 and as follows:
- (a) For any visible emissions observations conducted in accordance with EPA Method 22, record the information on the form referenced in EPA Method 22, Section 11.2.
 - (b) For any opacity observations conducted in accordance with the requirements of EPA Method 9, record the information on the form referenced in EPA Method 9, Sections 2.2 and 2.4.

Reporting: The permittee shall report in accordance with Section B110.

EQUIPMENT SPECIFIC REQUIREMENTS

OIL AND GAS INDUSTRY

A200 Oil and Gas Industry

A. This section has common equipment related to most Oil and Gas Operations.

A201 Engines

A. Periodic Emissions Testing (Units ENG1-9, ENG11-12)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by completing periodic emission tests during the monitoring period.

Monitoring: The permittee shall test using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. Emission testing is required for NOx and CO and shall be carried out as described below.

Test results that demonstrate compliance with the CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

For units with g/hp-hr emission limits, in addition to the requirements stated in Section B108, the engine load shall be calculated by using the following equation:

$$\text{Load(Hp)} = \frac{\text{Fuel consumption (scfh)} \times \text{Measured fuel heating value (LHV btu/scf)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100\% load or best efficiency}}$$

- (1) The testing shall be conducted as follows:
 - (a) Testing frequency shall be once per quarter.
 - (b) The monitoring period is defined as a calendar quarter.
- (2) The first test shall occur within the first monitoring period occurring after permit issuance.
- (3) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period.
- (4) The permittee shall follow the General Testing Procedures of Section B111.
- (5) Performance testing required by 40 CFR 60, Subpart JJJJ or 40 CFR 63, Subpart ZZZZ may be used to satisfy these periodic testing requirements if they meet the requirements of this condition and are completed during the specified monitoring period.

Recordkeeping: The permittee shall maintain records in accordance with Section B109, B110, and B111.

Reporting: The permittee shall report in accordance with Section B109, B110, and B111.

B. Initial Compliance Test (Units ENG1-9, ENG11-12)

<p>Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by performing an initial compliance test.</p>
<p>Monitoring: The permittee shall perform an initial compliance test in accordance with the General Testing Requirements of Section B111. Emission testing is required for NO_x and CO. Test results that demonstrate compliance with the CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits. The monitoring exemptions of Section B108 do not apply to this requirement.</p> <p>For units with g/hp-hr emission limits, the engine load shall be calculated by using the following equation: $\text{Load(Hp)} = \frac{\text{Fuel consumption (scfh)} \times \text{Measured fuel heating value (LHV btu/scf)}}{\text{Manufacturer's rated BSFC (btu/bhp-hr) at 100\% load or best efficiency}}$</p>
<p>Recordkeeping: The permittee shall maintain records in accordance with the applicable Sections in B109, B110, and B111.</p>
<p>Reporting: The permittee shall report in accordance with the applicable Sections in B109, B110, and B111.</p>

C. Catalytic Converter Operation (Units ENG1-9, ENG11-12)

<p>Requirement: The units shall be equipped and operated with an oxidation catalytic converter to control CO, VOC, and HAP emissions. Engines equipped with oxidation catalysts are not required to operate with an AFR. The permittee shall maintain the units according to manufacturer's or supplier's recommended maintenance, including replacement of oxygen sensor as necessary for oxygen-based controllers.</p>
<p>Monitoring: Each unit shall be operated with the catalytic converter, which includes catalyst maintenance periods. During periods of catalyst maintenance, the permittee shall either (1) shut down the engine; or (2) replace the catalyst with a functionally equivalent spare to allow the engine to remain in operation.</p>
<p>Recordkeeping: The permittee shall maintain records in accordance with Section B109.</p>
<p>Reporting: The permittee shall report in accordance with Section B110.</p>

D. 40 CFR 60, Subpart JJJJ (Units ENG1-9, ENG11-12)

<p>Requirement: The units will be subject to 40 CFR 60, Subparts A and JJJJ if the units are constructed (ordered) and manufactured after the applicability dates in 40 CFR 60.4230 and the permittee shall comply with the notification requirements in Subpart A and the specific requirements of Subpart JJJJ.</p>
<p>Monitoring: The permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4243.</p>
<p>Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4245.</p>
<p>Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4245.</p>

E. 40 CFR 60, Subpart OOOOa – (Reciprocating Compressors associated with Units ENG1-9, ENG11-12)

Requirement: The units will be subject to 40 CFR 60, Subparts A and OOOOa if the source is constructed, modified, or reconstructed after the applicability date in 40 CFR 60.5365a and meets the applicability criteria specified at §60.5365a(c). The permittee shall comply with the notification requirements in Subpart A and the specific requirements of Subpart OOOOa, including standards in §60.5385a.

Monitoring: The permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to §60.5410a, §60.5411a, §60.5415a, and §60.5416a.

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to 60.5415a(c) and 60.5420a.

Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to 60.5420a, and in Section B110.

F. 40 CFR 63, Subpart ZZZZ (Units ENG1-9, ENG11-12)

Requirement: The units will be subject to 40 CFR 63, Subparts A and ZZZZ if they meet the applicability criteria in 40 CFR 63.6590. The permittee shall comply with any applicable notification requirements in Subpart A and any specific requirements of Subpart ZZZZ.

Monitoring: The permittee shall comply with all applicable monitoring requirements of 40 CFR 63, Subpart A and Subpart ZZZZ.

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63, Subpart A and Subpart ZZZZ, including but not limited to 63.6655 and 63.10.

Reporting: The permittee shall comply with all applicable reporting requirements of 40 CFR 63, Subpart A and ZZZZ, including but not limited to 63.6645, 63.6650, 63.9, and 63.10.

A202 Glycol Dehydrators

A. Extended Gas Analysis and ProMax® or GRI-GLYCalc Calculation (Units DEHY1 - 3)

Requirement: To demonstrate compliance with the allowable VOC emission limits in Table 106.A:

(1) The dehydrators shall be equipped with a BTEX condenser; and

(2) The permittee shall conduct an annual extended gas analysis on the dehydrator inlet gas.

Monitoring: The permittee shall conduct an annual ProMax® or GRI-GlyCalc analysis using the most recent extended gas analysis and verify the input data. The permittee may use a method of calculating dehydrator emissions other than ProMax® or the most current version of GRI-GlyCalc if approved by the Department. Changes in the calculated emissions due solely to a change in the calculation methodology shall not be deemed an exceedance of an emission limit.

Recordkeeping: The permittee shall identify in a summary table all parameters that were used as inputs in the ProMax® or GRI-GLYcalc model. The permittee shall keep a record of the results, noting the emission rates for the dehydrator obtained from estimates using ProMax® or

GRI-GLYcalc.

Reporting: The permittee shall report in accordance with Section B110.

B. Glycol pump circulation rate (Units DEHY1 - 3)

Requirement: Compliance with the allowable VOC emission limits in Table 106.A shall be demonstrated by monitoring the glycol pump circulation rate for each unit and it shall not exceed 1656 gallons per hour (27.6 gallons per minute).
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Monitoring: The permittee shall monitor the circulation rate monthly. Monitoring shall include a calibration or visual inspection of pump rate setting.
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Recordkeeping: The permittee shall maintain records that include a description of the monitoring and are in accordance with Section B109.
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Reporting: The permittee shall report in accordance with Section B110.

C. Control Device Inspection (Units FL1, FL2, FL3, COND1-3, RB1-3)

Requirement: To demonstrate compliance with the allowable VOC emission limits in Table 106.A:
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(1) The still vent (Units DEHY1, DEHY2, DEHY3) emissions shall be routed at all times to the associated BTEX condenser (Unit COND1, COND2, COND3).
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(2) The flash tank vapors shall be captured and recycled in the dehydration system, and not vented to the atmosphere. Alternatively, flash tank vapors shall be routed to flares FL1-FL3 during SSM.
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(3) All the non-condensed hydrocarbon vapors resulting from the BTEX condensers (COND1, COND2, and COND3) shall be routed directly to a flare (Unit FL1, FL2, or FL3) and be destroyed. Alternatively, condenser vapors shall be routed to the dehydrator reboilers (RB1-RB3) for combustion during SSM.
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(4) The BTEX condensers (COND1, COND2, and COND3) shall be operational at all times that the facility is in operation. The flares (Units FL1, FL2, and FL3) shall be operational at all times that the facility is in operation except for periods of SSM during which condenser vapors will be routed to the dehydrator reboilers (RB1-RB3) for combustion as allowed under Condition A107.F.
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The BTEX condensers (COND1, COND2, and COND3) and the flares (Units FL1, FL2, and FL3) shall be installed, operated, and maintained according to manufacturers' specifications.

Monitoring: The permittee shall inspect the glycol dehydrator and the control equipment semi-annually to ensure it is operating in accordance with the manufacturer's recommended procedures.
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Recordkeeping: The permittee shall record the inspections and the results of all equipment and control device inspections chronologically, noting any maintenance or repairs needed to bring the dehydrator or other equipment into compliance. The permittee shall maintain a copy of the manufacturer's maintenance recommendations.

Reporting: The permittee shall report in accordance with Section B110.

D. Flares (Units FL1, FL2, FL3): Control Device for BTEX Condensers (COND1-COND3)

<p>Requirement:</p> <ol style="list-style-type: none"> 1) The permittee shall install, operate, and maintain the flares (Units FL1, FL2, and FL3) according to the manufacturer's specifications. 2) The permittee shall ensure that all emissions from the BTEX condensers are at all times routed to a flare (Units FL1, FL2, and FL3) and not vent to the atmosphere. Alternatively, condenser SSM vapors are routed to the dehydrator reboilers, RB1-3 in accordance with Condition A107.F. 3) In the event that a leak or defect is detected, the permittee shall repair the leak or defect as soon as practicable, not to exceed thirty days, and in a manner than minimized emissions to the atmosphere.
<p>Monitoring: The permittee shall monitor the following:</p> <ol style="list-style-type: none"> 1) The date, start time, and end time of any downtime and/or maintenance of a flare (Units FL1, FL2, or FL3). 2) Monthly, inspect the BTEX condensers for proper routing to a flare (Units FL1, FL2, or FL3) and inspect the BTEX condensers and the flares (Units FL1, FL2, or FL3) for defects. Defects include, but are not limited to, visible cracks, holes, or gaps: broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps or other closure devices.
<p>Recordkeeping:</p> <ol style="list-style-type: none"> 1) The permittee shall record the name of the person conducting the inspection and the results of all monthly equipment inspections, contemporaneously noting any maintenance or repairs needed to bring the BTEX condensers and/or flares (Units FL1, FL2, or FL3) into compliance with permit conditions. 2) The permittee shall record the date, start time, and end time of any downtime and/or maintenance of a flare (Units FL1, FL2, or FL3).
<p>Reporting: The permittee shall report in accordance with Section B110.</p>

E. 40 CFR 63, Subpart HH (Units DEHY1, DEHY2, DEHY3)

<p>Requirement: The units are subject to 40 CFR 63, Subpart HH and the permittee shall comply with all applicable requirements.</p>
<p>Monitoring: The permittee shall monitor as required by 40 CFR 63.772(b)(2) to demonstrate facility is exempt from general standards.</p>
<p>Recordkeeping: The permittee shall generate and maintain the records required by 40 CFR 63.774(d)(1)(ii) to demonstrate compliance with the general standard exemptions found in 40 CFR 63.764(e).</p>
<p>Reporting: The permittee shall meet all applicable reporting in 40 CFR 63, Subparts A and HH and in Section B110.</p>

A203 Tanks and Low-Pressure Separator**A. Crude Oil/Condensate Tanks Throughput (Units OT1-4)**

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by limiting the monthly rolling 12-month total oil/condensate throughput the four (4) tanks to 27,838,588 gallons per year (662,824 barrels/year).

Monitoring: The permittee shall monitor the monthly total throughput once per month.

Recordkeeping: The permittee shall record:

- (1) the monthly total throughput of liquids and,
- (2) each month the permittee shall use these values to calculate and record:
 - (a) during the first 12 months of monitoring, the cumulative total liquid throughput and after the first 12 months of monitoring, the monthly rolling 12-month total liquid throughput.

Tank breathing, working, and flashing emissions were calculated using ProMax®. Emission rates computed using the same parameters, but with a different Department approved algorithm that exceed these values will not be deemed non-compliance with this permit.

Records shall be maintained in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

B. Skim Tanks Throughput (Primary Unit SKT1 and Backup Unit SKT2)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by limiting the monthly rolling 12-month total water throughput to the two (2) tanks (primary and backup combined) to 8,274,184 gallons per year (197,004.4 barrels/year). Monitoring the throughput of water at the metered water storage tanks, or by an equivalent measurement system, will demonstrate water flow through this unit.

Monitoring:

- (1) The permittee shall monitor the monthly total throughput to the skim tank (Primary Unit SKT1 or Backup Unit SKT2) once per month.
- (2) At least once per month, the permittee shall inspect Units SKT1 and SKT2 and associated piping for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the event that a leak or defect is detected, the permittee shall repair the leak or defect as soon as practicable and in a manner that minimizes VOC and HAPs emissions to the atmosphere.

Recordkeeping: The permittee shall record:

- (1) the monthly total throughput of liquids and,
- (2) each month the permittee shall use these values to calculate and record:
 - (a) during the first 12 months of monitoring, the cumulative total liquid throughput and after the first 12 months of monitoring, the monthly rolling 12-month total liquid throughput.

Tank emissions were calculated using ProMax®. Emission rates computed using the same parameters, but with a different Department approved algorithm that exceed these values will

not be deemed non-compliance with this permit.

The permittee shall also record:

- (3) the name of the person conducting the inspections for defects and,
- (4) the results of all monthly inspections, contemporaneously noting any maintenance or repairs needed to bring the skim tanks into compliance with permit conditions.

Records shall be maintained in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

- C. Flares (Units FL1, FL2, FL3): Control Device for Oil/Condensate Tanks (Units OT1-4), Skim Tanks (SKT1 and SKT2), and Produced Water Tanks (WT1 and WT2)

Requirement:

- (1) The permittee shall install, operate, and maintain the flares (Units FL1, FL2, and FL3) according to the manufacturer's specifications.
- (2) The permittee shall ensure that all emissions from the Oil Tanks (Units OT1-4), Skim Tanks (SKT1 and SKT2), and Produced Water Tanks (WT1 and WT2) are at all times routed to a flare (Units FL1, FL2, and FL3). The permittee shall ensure that the Oil Tanks (Units OT1-4), Skim Tanks (SKT1 and SKT2), and Produced Water Tanks (WT1 and WT2) emissions do not vent to the atmosphere. During flare (Units FL1, FL2, and FL3) downtime, all emissions shall be reported as excess emissions under 20.2.7 NMAC.
- (3) In the event that a leak or defect is detected, the permittee shall repair the leak or defect as soon as practicable, not to exceed thirty days, and in a manner than minimized emissions to the atmosphere.

Monitoring: The permittee shall monitor the following:

- (1) The date, start time, and end time of any downtime and/or maintenance of a flare (Units FL1, FL2, or FL3).
- (2) Monthly, inspect the Oil Tanks (Units OT1-4), Skim Tanks (SKT1 and SKT2) for proper routing to a flare (Units FL1, FL2, or FL3) and inspect the Oil Tanks (Units OT1-4), Skim Tanks (SKT1 and SKT2), and Produced Water Tanks (WT1 and WT2) and the flares (Units FL1, FL2, or FL3) for defects. Defects include, but are not limited to, visible cracks, holes, or gaps: broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps or other closure devices.

Recordkeeping:

- (1) The permittee shall record the name of the person conducting the inspection and the results of all monthly equipment inspections, contemporaneously noting any maintenance or repairs needed to bring the Oil Tanks (Units OT1-4), Skim Tanks (SKT1 and SKT2), and Produced Water Tanks (WT1 and WT2) and/or flares (Units FL1, FL2, or FL3) into compliance with permit conditions.
- (2) The permittee shall record the date, start time, and end time of any downtime and/or maintenance of a flare (Units FL1, FL2, or FL3).

Reporting: The permittee shall report in accordance with Section B110.

D. Low Pressure Separator (LPS) and Control Devices (Vapor Recovery Units (VRU1, VRU2) and Flares (FL1, FL2, FL3))

<p>Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by capturing and routing the Low Pressure Separator VOC emissions as a closed loop system to VRU1 or VRU2 (back-up) and shall not vent to the atmosphere. In the event of VRU downtime, the Low Pressure Separator emissions shall be routed to Flares FL1, FL2, and/or FL3.</p>
<p>Monitoring: At least once per month, the permittee shall inspect the vapor recovery unit for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the event that a leak or defect is detected, the permittee shall repair the leak or defect as soon as practicable and in a manner that minimizes VOC and HAPs emissions to the atmosphere.</p>
<p>Recordkeeping: The permittee shall record the results of the vapor recovery unit inspections chronologically, noting any maintenance or repairs that are required.</p>
<p>Reporting: The permittee shall report in accordance with Section B110.</p>

E. Truck Loading – Crude Oil/Condensate Loadout (Unit Load)

<p>Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by limiting the total annual crude oil/condensate loadout volume to 3,050,880 gallons per year (72,640 barrels/year).</p>
<p>Monitoring: The permittee shall monitor the crude oil/condensate truck loadout volume on a monthly basis.</p>
<p>Recordkeeping: The permittee shall record the monthly crude oil/condensate truck loadout volume. Each month during the first 12 months of monitoring the permittee shall record the cumulative crude oil/condensate loadout volume and after the first 12 months of monitoring, the permittee shall calculate and record a monthly rolling 12-month total loadout volume. Records shall also be maintained in accordance with Section B109.</p>
<p>Reporting: The permittee shall report in accordance with Section B110.</p>

F. 20.2.38 NMAC, Hydrocarbon Storage Facilities (Units OT1-4)

<p>Requirement: The permittee shall comply with 20.2.38.112 NMAC. The permittee shall install flares to minimize hydrocarbon and hydrogen sulfide loss to the atmosphere and shall not operate the tanks without the control devices.</p>
<p>Monitoring: None.</p>
<p>Recordkeeping: The permittee shall maintain records in accordance with Section B109.</p>
<p>Reporting: The permittee shall report in accordance with Section B110.</p>

A204 Heaters/Boilers

A. Operational Inspections of Boilers and/or Heaters (Units RB1, RB2 & RB3, HTR1)

Requirement:

- (1) Compliance with the allowable emission limits in Table 106.A shall be demonstrated by performing annual inspections to ensure proper operation of Units RB1, RB2, and RB3, HTR1.
- (2) At a minimum, the operational inspections shall meet those recommended by the manufacturer or shall meet the facility specific procedure submitted to the Department.
- (3) If the permittee is using a facility specific procedure it shall submit an electronic version of the procedure to the Department’s Permit Section Manager within 90 days of implementing the procedure. If the plan cannot be submitted within 90 days, the permittee shall obtain written approval to extend the deadline from the Department’s Permit Section, either by regular or electronic mail. The permittee shall provide additional information or make changes to the plan as requested by the Department.
- (4) The permittee shall make changes or improvements to the inspection procedure based on experience with the unit and/or new information provided by the manufacturer. This updated procedure shall be made available to the Department upon request.

Monitoring:

- (1) Inspections shall be completed at least once per year or at the frequency recommended by the manufacturer.
- (2) At a minimum, inspections shall include the following:
 - (a) checking indicators to verify that the optimal amount of excess combustion air is introduced into the boiler combustion process such as a blue colored, steady flame;
 - (b) inspections of the unit(s) components and housing for cracks or worn parts.

Recordkeeping:

- (1) The permittee shall maintain records of operational inspections, including the indicators used to verify optimal excess combustion air, a description of the indicators, the unit component and housing inspections, and any adjustments needed to ensure optimal operation of the unit.
- (2) The permittee shall also keep records of the manufacturer’s recommended or the permittee’s facility specific operational inspection procedure and shall keep records of the percent of excess combustion air required for optimal performance.
- (3) The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

- B. Units RB1-RB3, HTR1: See Conditions A110 and A111. Compliance with the emission limits in Table 106.A is demonstrated by complying with those conditions.

A205 Turbines – Not required**A206 Flares****A. Flare Flame & Visible Emissions (20.2.61 NMAC) (Units FL1, FL2, FL3)**

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by the flares being equipped with a system to ensure that they are operated with a flame present at all times and operated with no visible emissions.

The flares are subject to the 20% opacity standards in 20.2.61 NMAC and complying with the no visible emissions requirements demonstrates compliance with 20.2.61 NMAC opacity limit.

Monitoring:**(1) Flare Pilot Flame:**

The permittee shall continuously monitor the presence of a flare pilot flame using a thermocouple or any equivalent device approved by the Department and shall be equipped with a continuous recorder and alarm or equivalent, to detect the presence of a flame.

(2) Visible Emissions:

Annually, the permittee shall conduct a visible emissions observation in accordance with the requirements at 40 CFR 60, Appendix A, Reference Method 22 to certify compliance with the no visible emission requirement on the process flare. The observation period is at least 2 consecutive hours where visible emissions are not to exceed a total of 5 minutes during any 2 consecutive hours.

At least once per year during a blow down event, the permittee shall conduct a visible emissions observation in accordance with the requirements at 40 CFR 60, Appendix A, Reference Method 22 to certify compliance with the no visible emission requirements. Each Method 22 test shall occur for the duration of the blow down event or for 30 minutes, whichever is less. Visible emissions shall not occur for more than 5 minutes during any consecutive 30-minute period. For blowdown events that occur for less than 30 minutes, visible emissions shall not occur for more than 15% during the duration of the blow down event.

If the flare is located at an unmanned site, used only for emergencies, and where there are no scheduled blowdown-maintenance events to observe flare combustion, the permittee shall at a minimum conduct the visible emissions observation in accordance with the requirements of EPA Method 22 on the pilot flame.

Recordkeeping:**(1) Flare Pilot Flame:**

The permittee shall record all instances of alarm activation, including the date and cause of alarm activation, actions taken to bring the flare into normal operating conditions, and maintenance activities.

(2) Visible Emissions:

For any visible emissions observations conducted in accordance with EPA Method 22, the permittee shall record the information on the form referenced in EPA Method 22, Section 11.2.

For any visible emissions observations conducted in accordance with EPA Method 22, record the information on the form referenced in EPA Method 22, Section 11.2. If the visible emissions observation was conducted only on the pilot flame, the record shall also include the reasons that the test could not be conducted during a blowdown event.

Reporting: The permittee shall report in accordance with Section B110.

B. Flare Operation Requirement (Units FL1, FL2, FL3)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by ensuring that:

- 1) The igniter shall be operational at all times gas is sent to a flare.
- 2) The flare shall combust gas at all times gas is sent to a flare.
- 3) The flares shall be installed, operated, and maintained according to manufacturer's specifications.

Monitoring: The permittee shall:

- 1) Monthly, inspect the flares to ensure they are operating in accordance with the manufacturer's specifications.
- 2) Monitor the flare pilot with a SCADA system, or equivalent system, which signals when the pilot is out. In that event, the auto-igniter shall relight the pilot.

Recordkeeping: The permittee shall record:

- 1) Chronologically, the name of the person conducting the inspection, the results of all equipment inspections, and any maintenance or repairs needed for the flare(s) to be compliant.
- 2) Maintain a copy of the manufacturer's maintenance recommendations.
- 3) The SCADA system, or equivalent system, shall record the time the pilot is down along with any flow to the flare during that time.

Reporting: The permittee shall report in accordance with Section B110.

C. Flaring Emissions (Units FL1, FL2, FL3)

Requirement: The permittee shall not exceed the pound per hour (pph) and ton per year (tpy) emission limits of NOx and CO in Table A106.A and shall demonstrate compliance with these limits by calculating and summarizing these emission rates as required in the recordkeeping condition below.

Monitoring: For high pressure sides of Units FL1, FL2, and FL3, a gas flowmeter and flow totalizer, equipped with a chart recorder or data logger (electronic storage), shall be installed in

the flare line to measure and record the total standard cubic feet (scf) of gas sent to the flare during each hour and each month.

For low pressure sides of Units FL1 FL2, and FL3, the permittee shall use the monitored throughputs collected in accordance with Conditions A202.A and A203.C to determine the flaring emissions.

The permittee shall measure the H₂S content, the total sulfur content, the VOC content, and the heating value (Btu/scf) of the gas sent to the flare for combustion. H₂S shall be measured annually with an extended gas analysis. The total sulfur content, VOC content, and heating value (Btu/scf) of the natural gas sent to the flare shall be measured at least once annually with an extended gas analysis.

If used, the flow meter, totalizer, and the inline monitor shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.

Recordkeeping:

The following records shall be kept:

- annual extended gas analyses including H₂S, total sulfur, and VOC content
- both the hourly and monthly flowmeter and flow totalizer measurements of gas sent to the flare

Each month, the permittee shall record and summarize the following:

- H₂S and the total sulfur content from the most recent annual gas analysis
- percent VOC content from the most recent annual gas analysis
- gas heating value (Btu/scf) from the most recent annual gas analysis
- the maximum hourly gas flow rate (scf/hr) that occurred during the month during a process flaring event
- the hourly gas flow rate (scf/hr) due to process flaring events for any hours that exceeded the process flare pph emission limit during the month
- the total month's scf of gas sent to the flare due to process flaring events
- during the first 12-months of monitoring, the cumulative total volume of gas sent to each flare (scf/yr) and calculated emissions due to process flaring events
- after the first 12-months of monitoring, the monthly rolling 12-month total of gas sent to each flare (scf/yr) and calculated emissions due to process flaring events

For each process flaring event, the permittee shall record a description of the equipment, activity, or unit number that is the source of emissions. The permittee shall also meet the recordkeeping requirements in General Condition B109 of this permit.

Records of flowmeter, totalizer, and inline monitor certifications, calibrations, breakdowns, reasons for the breakdown, and corrective actions taken shall be maintained.

Each month, to demonstrate compliance with emission limits, the permittee shall calculate and summarize the maximum pph emission rate, any pph emission rate exceeding the permitted limits, and the ton per year emission rates of NO_x, CO, VOC, SO₂, and H₂S using the following information:

- the H₂S content, total sulfur content, VOC content, and the gas heating value (MMBtu/scf) from the most recent gas analyses
- the emission factors used to calculate NO_x and CO
- the maximum hourly gas flow rate (scf/hr)
- the hourly gas flow rate (scf/hr) for any hours that exceeded any pph emission limit during the month
- during the first 12 months of monitoring, the cumulative total of gas sent to each flare due to process flaring events
- after the first 12 months of monitoring, the monthly rolling 12-month total of gas sent to each flare (scf/yr) due to process flaring events

To demonstrate compliance with each individual emission limit, records shall be kept of the monthly sum of total NO_x, CO, VOC, SO₂, and H₂S emissions due to process flaring events during the first 12 months and, thereafter of the monthly rolling 12-month total of NO_x, CO, VOC, SO₂, and H₂S emissions due to process flaring events.

Reporting: Records and reports shall be maintained on-site unless specifically required to be submitted to the Department or EPA by another condition of this permit or by a state or federal regulation. Records for unmanned sites may be kept at the nearest company office.

D. Flare Parametric Monitoring for Low Pressure Sides - Low Pressure Side Pilots and Vapors from Oil Tanks and Dehydrator (Units FL1, FL2, FL3)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by operating the flare in accordance with the requirements specified in recordkeeping below.

Monitoring: The permittee shall monitor the flares in accordance with Condition A.206.C.

Recordkeeping:

1. The permittee shall use the information recorded in Condition A.206.C to calculate the flow rate to determine if the facility meets the velocity requirements of this Condition.
2. The maximum tip velocity of the flare, (V_{max}), shall be determined annually, and records kept demonstrating that the actual flare tip velocity does not exceed the allowable V_{max}. Compliance shall be determined utilizing either method (a), (b), or (c) below:

The maximum permitted velocity (i.e., the greater of either calculated V_{max}, 60 ft/sec or 400 ft/sec, based on method (a), (b), or (c) below) shall be recorded as feet/second and the corresponding total flow rate to the flare in MMscf/hour shall be used to compare to the actual volumetric flow rate (at STP) to demonstrate compliance with the maximum velocity permitted.

(a) Actual tip velocity less than 60 feet per second (ft/sec) for gases having a lower heating value less than 1000 Btu/ft³ will be in compliance with this requirement.

(b) Actual tip velocity less than 400 ft/sec for gases having a lower heating value greater than 1000 Btu/ft³ will be in compliance with this requirement.

(c) Actual tip velocity less than the calculated maximum velocity (V_{max}) using the following equations will be in compliance with this requirement. The calculated V_{max} shall be based on the weighted mean heating value of the inlet gas plus supplemental fuel gas.

V_{max} of the flare shall be calculated annually and determined using the following equation:

$$\text{Log}10 (V_{max}) = (HT + 28.8) / 31.7$$

V_{max} = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

HT = The net heating value is determined using the following equation:

$$H_T = K \left[\sum_{i=1}^n C_i H_i \right]$$

where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of off-gas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$$K = \text{Constant} \cdot 1.740 \times 10^{-7} \left(\frac{1}{\text{ppm}} \right) \left(\frac{\text{g mole}}{\text{scm}} \right) \left(\frac{\text{MJ}}{\text{kcal}} \right)$$

where the standard temperature for $\left(\frac{\text{g mole}}{\text{scm}} \right)$ is 20°C;

C_i = Concentration of sample component "i" in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994); and

H_i = Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95

The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation:

$$V_{max} = 8.706 + 0.7084 (HT)$$

V_{max} = Maximum permitted velocity, m/sec

8.706 = Constant

0.7084 = Constant

H_T = The net heating value as determined above.

3) The permittee shall maintain records in accordance with Section B109.

Reporting: The permittee shall report in accordance with Section B110.

A207 Sulfur Recovery Unit – Not required

A208 Amine Unit – Not required

A209 Fugitives

A. 40 CFR 60, Subpart OOOOa – Fugitives (Unit FUG)

Requirement: The permittee shall comply with 40 CFR 60, Subparts A and OOOOa if a source is constructed, modified, or reconstructed after the applicability date in 40 CFR 60.5365a; and the permittee shall comply with the notification requirements in Subpart A and the specific requirements of Subpart OOOOa, including standards in 60.5400a.

Monitoring: The permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to 60.5410a, 60.5415a(c), and 60.5415a(h).

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to 60.5415a(c), 60.5415a(h), and 60.5420a.

Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to 60.5420a, and in Section B110.

PART B GENERAL CONDITIONS (Attached)

PART C MISCELLANEOUS: Supporting On-Line Documents; Definitions; Acronyms (Attached)