Air Quality Bureau
TITLE V OPERATING PERMIT
Issued under 20.2.70 NMAC

Certified Mail No: DRAFT AS OF 12/15/2022
Return Receipt Requested

Operating Permit No:	P296
Facility Name:	Longhorn Compressor Station
Facility Owner/Operator:	XTO Energy Inc
Mailing Address:	22777 Springwood Village Parkway W4.6B.374 Spring, TX 77389
TEMPO/IDEA ID No:	39012 - PRT20200001
AIRS No:	350152138
Permitting Action:	Initial TV Permit
Source Classification:	Title V Major
Facility Location:	607520m E by 3582220m N; Zone 13; Datum WGS84
County:	Eddy
Air Quality Bureau Contact:	Miranda Baldwin
Main AQB Phone No.	(505) 476-4300
TV Permit Expiration Date:	_____
TV Renewal Application Due:	_____

_____ _____

Liz Bisbey-Kuehn **Date**
Bureau Chief
Air Quality Bureau

Template version: 06/28/2021

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PART A FACILITY SPECIFIC REQUIREMENTS

A100 Introduction

A. Not Applicable

A101 Permit Duration (expiration)

A. The term of this permit is five (5) years. It will expire five years from the date of issuance. Application for renewal of this permit is due twelve (12) months prior to the date of expiration. (20.2.70.300.B.2 and 302.B NMAC)

B. If a timely and complete application for a permit renewal is submitted, consistent with 20.2.70.300 NMAC, but the Department has failed to issue or disapprove the renewal permit before the end of the term of the previous permit, then the permit shall not expire and all the terms and conditions of the permit shall remain in effect until the renewal permit has been issued or disapproved. (20.2.70.400.D NMAC)

A102 Facility: Description

A. The function of the facility is to compress natural gas for gathering pipeline transmission using natural gas-fired reciprocating engines.

B. This facility is located approximately 15 miles northeast of Loving, New Mexico in Eddy County. (20.2.70.302.A(7) NMAC)

C. This new Title V permit incorporates the requirements from NSR permit 8349-M2, issued February 11, 2022:

D. Tables 102.A and Table 102.B show the potential to emit (PTE) from this facility for information only. This is not an enforceable condition and excludes insignificant or trivial activities.

Table 102.A: Total Potential to Emit (PTE) from Entire Facility

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NOx)	204.7
Carbon Monoxide (CO)	226.5
Volatile Organic Compounds (VOC) [1]	260.2
Sulfur Dioxide (SO_2)	19.5
Particulate Matter 10 microns or less (PM_{10})	16.8
Particulate Matter 2.5 microns or less ($PM_{2.5}$)	16.8
Greenhouse Gas (GHG) as CO_2e	259,101

1. VOC total includes emissions from Fugitives, SSM and Malfunctions.

2. PM is a regulated new source review pollutant per 20.2.74 NMAC Prevention of Significant Deterioration and 20.2.70 NMAC, Title V. No ambient air quality standards apply to PM.

Table 102.B: Total Potential to Emit (PTE) for *Hazardous Air Pollutants (HAPs) that exceed 1.0 ton per year

Pollutant	Emissions (tons per year)
Acetaldehyde	4.6
Benzene	1.0
Formaldehyde	19.4
n-hexane	2.2
Total HAPs**	28.8

* 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 and Non-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.
NSR Permit No: 8349M2 (Per 20.2.72 NMAC)	X	Entire Facility
20.2.1 NMAC General Provisions	X	Entire Facility
20.2.7 NMAC Excess Emissions	X	Entire Facility
20.2.38 NMAC Hydrocarbon Storage Facility	X	OT1 – OT4
20.2.50 Ozone Precursor Pollutants	X	RICE units ENG1-9, ENG11-12; DEHY1-3; FUG; LOAD; Pig Launching and Receiving; Compressor Seals, Control Devices (Condensers 1-3, VC1)
20.2.61 NMAC Smoke and Visible Emissions	X	ENG1 – ENG3, ENG4[1] – ENG9[1](TBD), ENG 11 – ENG12; FL1-2; HTR1; RB1-3; VC1
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

Table 103.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
20.2.74 NMAC Permits – Prevention of Significant Deterioration (PSD)	X	Entire Facility
20.2.77 NMAC New Source Performance Standards	X	Units subject to 40 CFR 60
20.2.82 NMAC Maximum Achievable Control Technology 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	ENG1 – ENG3, ENG4[1] – ENG9[1](TBD), ENG 11 – ENG12; FUG
40 CFR 60, Subpart JJJJ	X	ENG1 – ENG3, ENG4[1] – ENG9[1](TBD), ENG 11 – ENG12
40 CFR 60, Subpart OOOOa	X	Compressors for ENG1 – ENG3, ENG4[1] – ENG9[1](TBD), ENG 11 – ENG12; FUG
40 CFR 63, Subpart A, General Provisions	X	ENG1 – ENG3, ENG4[1] – ENG9[1](TBD), ENG 11 – ENG12; DEHY1-3
40 CFR 63, Subpart HH	X	DEHY1-3
40 CFR 63, Subpart ZZZZ	X	ENG1 – ENG3, ENG4[1] – ENG9[1](TBD), ENG 11 – ENG12

B. Compliance with the terms and conditions of this permit regarding source emissions and operation demonstrate compliance with national ambient air quality standards specified at 40 CFR 50, which were applicable at the time air dispersion modeling was performed for the facility's NSR Permit 8349M2.

A104 Facility: Regulated Sources

A. Table 104.A lists the emission units authorized for this facility. Emission units identified as insignificant or trivial activities (as defined in 20.2.70.7 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	Manufacturer Rated Capacity /Permitted Capacity
ENG1	Natural Gas Compressor Engine 4SLB	Caterpillar	G3616	ZZY00906	3/1/2019	3/1/2019	5000 hp
ENG2	Natural Gas Compressor Engine 4SLB	Caterpillar	G3616	ZZY00911	3/1/2019	3/1/2019	5000 hp
ENG3	Natural Gas Compressor Engine 4SLB	Caterpillar	G3616	ZZY00912	3/1/2019	3/1/2019	5000 hp
ENG4[1]	Natural Gas Compressor Engine 4SLB	Caterpillar	G3616	TBD	TBD	TBD	5000 hp
ENG5[1]	Natural Gas Compressor Engine 4SLB	Caterpillar	G3616	TBD	TBD	TBD	5000 hp
ENG6[1]	Natural Gas Compressor Engine 4SLB	Caterpillar	G3616	TBD	TBD	TBD	5000 hp
ENG7[1]	Natural Gas Compressor Engine 4SLB	Caterpillar	G3616	TBD	TBD	TBD	5000 hp
ENG8[1]	Natural Gas Compressor Engine 4SLB	Caterpillar	G3616	TBD	TBD	TBD	5000 hp
ENG9[1]	Natural Gas Compressor Engine 4SLB	Caterpillar	G3616	TBD	TBD	TBD	5000 hp
ENG11	Natural Gas Compressor Engine 4SLB	Caterpillar	3516J TA	N6W01216	2/1/2019	2/1/2019	1380 hp
ENG12	Natural Gas Compressor Engine 4SLB	Caterpillar	3516J TA	N6W01187	1/1/2019	1/1/2019	1380 hp
HTR1	Fuel Line Heater	Wenco Energy Corp	SB20-12H	0819-951	2019	2019	0.75 MMBtu/hr
RB1[1]	Glycol Regenerator Reboiler	TBD	TBD	TBD	TBD	TBD	2.0 MMBtu/hr
RB2[1]	Glycol Regenerator Reboiler	TBD	TBD	TBD	TBD	TBD	2.0 MMBtu/hr
RB3[1]	Glycol Regenerator Reboiler	TBD	TBD	TBD	TBD	TBD	2.0 MMBtu/hr
FL1	Dual High Pressure/Low Pressure Flare 1	Tornado	Guyed Dual Air Assist	14785/17154	2019	2019	70 MMscf/d
FL2[1]	Dual High Pressure/Low Pressure Flare 2	Tornado	TBD	TBD	TBD	TBD	70 MMscf/d
VC1	Vapor Combustor Unit	Cimarron Energy	N/A	5604792	2019	2019	N/A
SKT1	Skim Tank	Stellmation	N/A	P-000-469-918-000003	2019	2019	1000 bbl
SKT2[1]	Skim Tank (Backup)	TBD	N/A	TBD	TBD	TBD	1000 bbl

Table 104.A: Regulated Sources List

Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity /Permitted Capacity
OT1	Condensate Tank	Stellmation	N/A	P-000-463-144-0000018	2019	2019	500 bbl
OT2	Condensate Tank	Stellmation	N/A	P-000-463-144-0000014	2019	2019	500 bbl
OT3	Condensate Tank	Stellmation	N/A	P-000-463-144-0000015	2019	2019	500 bbl
OT4	Condensate Tank	Stellmation	N/A	P-000-463-144-0000016	2019	2019	500 bbl
WT1	Produced Water Tank	Stellmation	N/A	P-000-463-144-0000013	2019	2019	500 bbl
WT2	Produced Water Tank	Stellmation	N/A	P-000-463-144-0000017	2019	2019	500 bbl
VRU1	Low Pressure Separator VRU #1	Platinum Vapor Control	PVR-1832	N/A	2019	2019	125 HP
VRU2	Low Pressure Separator VRU Backup	Platinum Vapor Control	PVR-1833	N/A	2019	2019	125 HP
DEHY1	TEG Dehydrator with Condenser	Titan	N/A	WIP.NP 001314-000	2019	2019	80 MMscfd
DEHY2[1]	TEG Dehydrator with Condenser	N/A	N/A	N/A	TBD	TBD	80 MMscfd
DEHY3[1]	TEG Dehydrator with Condenser	N/A	N/A	N/A	TBD	TBD	80 MMscfd
LPS	Low Pressure Separator	N/A	N/A	N/A	2019	2019	N/A
LOAD	Condensate Truck Loading	N/A	N/A	N/A	N/A	N/A	223 bbl/d
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
Malfunction	Malfunction Emissions	N/A	N/A	N/A	N/A	N/A	N/A
N/A	Pig Launching and Receiving	N/A	N/A	N/A	N/A	N/A	N/A
N/A	Compressor Seals	N/A	N/A	N/A	N/A	N/A	N/A
N/A	Control Devices (Condensers 1-3, VC1)	N/A	N/A	N/A	N/A	N/A	N/A

1. All TBD (to be determined) units and like-kind engine replacements must be evaluated for applicability to NSPS and MACT requirements.

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: Control Equipment List:

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit Number(s)[1]
FL1	Dual High Pressure/Low Pressure Flare 1	VOC, HAP	Facility Inlet, OT1-OT4, WT1-WT2, SKTK1/SKTK2, LPS
FL2	Dual High Pressure/Low Pressure Flare 2	VOC, HAP	Facility Inlet, OT1-OT4, WT1-WT2, SKTK1/SKTK2, LPS
VC1	Vapor combustor	VOC, HAP	DEHY1-3 BTEX Condenser Vapors
COND1-COND3	BTEX Condenser	VOC, HAP	DEHY1-DEHY3
CAT1-CAT9, CAT11-CAT12	Engine Catalysts	CO, VOC, HAP	ENG1-ENG9, ENG11-ENG12
VRU1	Low Pressure Separator VRU #1	VOC, HAPs	LPS
VRU2	Low Pressure Separator VRU Backup	VOC, HAPs	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	PM_{10} pph	PM_{10} tpy	$PM_{2.5}$ pph	$PM_{2.5}$ tpy
ENG1	4.1	18.1	4.4	19.2	3.5	15.2	<	1.8	<	1.6	<	1.6
ENG2	4.1	18.1	4.4	19.2	3.5	15.2	<	1.8	<	1.6	<	1.6
ENG3	4.1	18.1	4.4	19.2	3.5	15.2	<	1.8	<	1.6	<	1.6
ENG4	4.1	18.1	4.4	19.2	3.5	15.2	<	1.8	<	1.6	<	1.6
ENG5	4.1	18.1	4.4	19.2	3.5	15.2	<	1.8	<	1.6	<	1.6
ENG6	4.1	18.1	4.4	19.2	3.5	15.2	<	1.8	<	1.6	<	1.6
ENG7	4.1	18.1	4.4	19.2	3.5	15.2	<	1.8	<	1.6	<	1.6
ENG8	4.1	18.1	4.4	19.2	3.5	15.2	<	1.8	<	1.6	<	1.6
ENG9	4.1	18.1	4.4	19.2	3.5	15.2	<	1.8	<	1.6	<	1.6
ENG11	1.9	8.3	1.0	4.4	1.3	5.6	<	<	<	<	<	<

Unit No.	NO_x[1] pph	NO_x[1] tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO_2 pph	SO_2 tpy	PM_{10} pph	PM_{10} tpy	$PM_{2.5}$ pph	$PM_{2.5}$ tpy
ENG12	1.9	8.3	1.0	4.4	1.3	5.6	<	<	<	<	<	<
RB1	<	1.3	<	1.1	<	<	<	<	<	<	<	<
RB2	<	1.3	<	1.1	<	<	<	<	<	<	<	<
RB3	<	1.3	<	1.1	<	<	<	<	<	<	<	<
FL1-FL2 Pilot	0.7	2.9	1.3	5.8	0.9	4.1	0.01	0.03	0.03	0.1	0.03	0.1
FL1-FL2 Norm	1.9	7.7	3.7	15.4	11.5	25.6	0.01	0.04	0.03	0.1	0.03	0.1
VC1	0.4	1.8	0.8	3.6	2.6	11.4	0.3	1.3	0.01	0.04	0.01	0.04
SKT1	-	-	-	-	0.0	0.0	-	-	-	-	-	-
SKT2	-	-	-	-	0.0	0.0	-	-	-	-	-	-
OT1	-	-	-	-	0.0	0.0	-	-	-	-	-	-
OT2	-	-	-	-	0.0	0.0	-	-	-	-	-	-
OT3	-	-	-	-	0.0	0.0	-	-	-	-	-	-
OT4	-	-	-	-	0.0	0.0	-	-	-	-	-	-
WT1	-	-	-	-	0.0	0.0	-	-	-	-	-	-
WT2	-	-	-	-	0.0	0.0	-	-	-	-	-	-
DEHY1	-	-	-	-	0.0	0.0	-	-	-	-	-	-
DEHY2	-	-	-	-	0.0	0.0	-	-	-	-	-	-
DEHY3	-	-	-	-	0.0	0.0	-	-	-	-	-	-
LPS	-	-	-	-	0.0	0.0	-	-	-	-	-	-
LOAD	-	-	-	-	*	11.1	-	-	-	-	-	-

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO_2.

2 Title V annual fee assessments are based on the sum of allowable tons per year emission limits in Sections A106 and A107.

3 Compliance with emergency flare emission limits is demonstrated by limiting combustion to pilot and/or purge gas only.

"-" indicates the application represented emissions are not expected for this pollutant.

"<" 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. Although modeled at the calculated value, the Department has determined compliance demonstrations of these very small calculated values are either technically or practically infeasible. For limits expressed as "<", actual emissions in excess of 1.0 pph and 1.0 tpy are excess emissions to be reported per General Condition B110.E.

"*" indicates hourly emission limits are not appropriate for this operating situation.

4 To report excess emissions for sources with no pound per hour and/or ton per year emission limits, see condition B110.E.

Table 106.B: 40 CFR 63, Subpart JJJJ for Units ENG1 – ENG3, ENG4 – ENG9 (TBD) and ENG11 – ENG12

Engine type and fuel	Maximum engine power	Manufacture date	Emission Standard					
			g/hp-hr			ppmvd at 15% O_2		
			NOx	CO	VOC	NOx	CO	VOC
Natural Gas and Non-Emergency SI Lean Burn LPG (except lean burn 500≤HP<1,350)	HP≥500	7/1/2010	1.0	2.0	0.7	82	270	60

B. Engines subject to emission standards shown in Table 106.C and 106.D shall comply with these emission standards in accordance with the dates specified in 20.2.50.113.B NMAC.

Table 106.C - EMISSION STANDARDS FOR EXISTING NATURAL GAS-FIRED SPARK IGNITION ENGINES (Units ENG1-3, ENG11-12)

Engine Type	Rated bhp	NO_x	CO	NMNEHC (as propane)
4-Stroke Lean Burn	>1,000 bhp and <1,775 bhp	2.0 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr
4-Stroke Lean Burn	≥1,775 bhp	0.5 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr

Table 106.D - EMISSION STANDARDS FOR NEW NATURAL GAS-FIRED SPARK IGNITION ENGINES (Units ENG4-9)

Engine Type	Rated bhp	NO_x	CO	NMNEHC (as propane)
Lean-burn	> 500 and < 1875	0.50 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr
Lean-burn	≥ 1875	0.30 g/bhp-hr	0.60 g/bhp-hr	0.70 g/bhp-hr

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

A. The maximum allowable SSM and Malfunction 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 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
SSM	**Compressor & Associated Piping Blowdowns from ENG1-9, ENG11-12**	-	-	-	-	*	10.0	-	-	-	-

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
MALFUNCTION	[1]Venting of Gas Due to Malfunction	-	-	-	-	*	10.0	-	-	-	-
FL1-FL2 SSM	SSM activity from Flares FL1 and FL2	541.7	8.1	1081.4	16.2	993.0	18.4	4.9	0.1	22.3	0.3

"*" indicates hourly emission limits are not appropriate for this operating situation.
"-" indicates the application represented emissions are not expected for this pollutant.

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

C. SSM Emissions (Unit SSM)

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 VOC emissions during the first 12 months due to SSM events and, thereafter of the monthly rolling 12-month total of VOC emissions due to SSM 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 and of the volume of total gas vented in MMscf used to calculate the VOC emissions.

(3) The permittee shall record the calculated emissions and parameters used in calculations in accordance with Condition B109, except the requirement in B109.E 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. Malfunction Emissions (Unit MALFUNCTION)

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.

E. SSM Flare (Flare SSM for FL1 and FL2)

Requirement:

Compliance with routine or predictable startup, shutdown, and maintenance (SSM) emission limits in Table 107.A shall be demonstrated by operating the flare in accordance with the requirements of Condition A206.A and A206.B 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 NOx, CO, VOC, SO_2, and H_2S 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.B;

(b) H_2S content, total sulfur content, VOC content, and heating value (BTU/scf) of the gas from Condition A206.B;

(c) the emission factors represented in the permit application and approved by the Department, for NOx and CO emission rates; and

(d) VOC and H_2S 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) During the first 12 months of this condition taking effect, the permittee shall record the monthly total tons of NOx, CO, VOC, SO_2, and H_2S emissions.

(b) After the first 12 months of this condition taking affect, the permittee shall record the monthly rolling 12-month total tpy NOx, CO, VOC, SO_2, and H_2S 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.

A108 Facility: Hours of Operation

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 (20.2.70.302.E NMAC)

A. A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month reporting period. The six month reporting periods start on May 1st and November 1st of each year.

B. The Annual Compliance Certification Report is due within 30 days of the end of every 12-month reporting period. The 12-month reporting period starts on May 1st of each year.

A110 Facility: Fuel and Fuel Sulfur Requirements

A. Fuel and Fuel Sulfur Requirements (Units ENG1 - ENG9, ENG11 - ENG12, RB1 - RB3, HTR1)

Requirement:

All combustion emission units shall combust only natural gas containing no more than 3.8 grains of total sulfur per 100 dry standard cubic feet.

Monitoring:

No monitoring is required. Compliance is demonstrated through records.

Recordkeeping:

(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 Requirements (Units ENG1 - ENG9, ENG11 - ENG12, 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 Engine

A. Periodic Emissions Testing (Units ENG1 - ENG9, ENG11 - ENG12)

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 ENG4 - ENG9)

Requirement:
Compliance with the allowable emission limits in Table 106.A shall be demonstrated by performing an initial compliance test.

Monitoring:
The permittee shall perform an initial compliance test in accordance with the General Testing Requirements of Section B111. Emission testing is required for NOx 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.

For units with g/hp-hr emission limits, the engine load shall be calculated by using the following equation:

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

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

Reporting:
The permittee shall report in accordance with the applicable Sections in B109, B110, and B111.

C. Catalytic Converter Operation (Units ENG1 - ENG9, ENG11 - ENG12)

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.
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.
Recordkeeping: The permittee shall maintain records in accordance with Section B109.
Reporting: The permittee shall report in accordance with Section B110.

D. 40 CFR 60, Subpart JJJJ (Units ENG4 - ENG9 potentially)

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.
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.
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.
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.

E. 40 CFR 60, Subpart JJJJ (Units ENG1 - ENG3, ENG11 - ENG12)

Requirement: The units are subject to 40 CFR 60, Subparts A and JJJJ and shall comply with the notification requirements in Subpart A and the specific requirements of Subpart JJJJ.
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.
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.

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.

F. 40 CFR 63, Subpart ZZZZ (Units ENG4 - ENG9 potentially)

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.

G. 40 CFR 63, Subpart ZZZZ (Units ENG1 - ENG3, ENG11 - ENG12)

Requirement:

The units are subject to 40 CFR 63, Subpart ZZZZ and the permittee shall comply with all applicable requirements of Subpart A and 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.

H. 20.2.50 NMAC Spark Ignition Engines (Units RICE ENG1-9, ENG11-12)

Requirement: The units are subject to 20.2.50 NMAC and the permittee shall comply with all applicable requirements, including the general provisions of 20.2.50.112 as well as the requirements and emission standards in 20.2.50.113.B. The units shall comply with these

emission standards in accordance with the dates specified in 20.2.50.113.B NMAC.
Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.113.C, and in accordance with section B108 of this permit
Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.113.D, and in accordance with section B109 of this permit.
Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.113.E, and in accordance with section B110 of this permit.

I. 20.2.50 NMAC Compressor Seals (Compressor for Units ENG1-9, ENG11-12)

Requirement: The units are subject to 20.2.50 NMAC and the permittee shall comply with all applicable requirements, including the general provisions of 20.2.50.112 and the emission standards in 20.2.50.114.B. The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.114.B.
Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.114.C, and in accordance with section B108 of this permit
Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.114.D, and in accordance with section B109 of this permit.
Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.114.E, and in accordance with section B110 of this permit.

A202 Glycol Dehydrators

A. Extended Gas Analysis and ProMax Calculation (Units DEHY1 - DEHY3)

Requirement: Compliance with the allowable VOC emission limits in Table 106.A shall be demonstrated by: (1) The dehydrators shall be equipped with BTEX condensers; and (2) The permittee shall conduct an annual extended gas analysis on the dehydrator inlet gas.
Monitoring: The permittee shall conduct an annual ProMax 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 the most current version of ProMax 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 model. The permittee shall keep a record of the results, noting the emission rates for the dehydrator obtained from estimates using ProMax.
Reporting: The permittee shall report in accordance with Section B110.

B. Glycol pump circulation rate (Units DEHY1 - DEHY3)

Requirement:

Compliance with the allowable 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).
Monitoring: The permittee shall monitor the circulation rate monthly. Monitoring shall include a calibration or visual inspection of pump rate setting.
Recordkeeping: The permittee shall maintain records that include a description of the monitoring and are in accordance with Section B109.
Reporting: The permittee shall report in accordance with Section B110.

C. Control Device Inspection (Unit VC1, COND1 - COND3)

Requirement: Compliance with the allowable VOC emission limits in Table 106.A shall be demonstrated by: (1) The still vent (Units DEHY1 - DEHY3) emissions shall be routed at all times to the associated BTEX condensers (Unit COND1 - COND3). (2) The flash tank vapors shall be captured and recycled in the dehydration system, and not vented to the atmosphere. (3) All the non-condensed hydrocarbon vapors resulting from the BTEX condensers (COND1 - COND3) shall be routed directly to the vapor combustor (Unit VC1) and be destroyed. (4) The BTEX condensers (COND1 - COND3) and the vapor combustor (Unit VC1) shall be operational at all times that the facility is in operation. The BTEX condensers (COND1 - COND3) and the vapor combustor (Unit VC1) 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.
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. Vapor Combustor (Unit VC1): Control Device for Uncondensed Hydrocarbon Vapors from the BTEX Condensers (COND1 - COND3)

Requirement: The permittee shall install, operate, and maintain the vapor combustor (Unit VC1) according to the manufacturer's specifications. (1) The permittee shall ensure that all uncondensed hydrocarbon vapors from BTEX condensers are, at all times, routed to a vapor combustor (Unit VC1). The permittee shall ensure that the BTEX condenser emissions do not vent to the atmosphere. During vapor

combustor (Unit VC1) downtime, all emissions shall be reported as excess emissions under 20.2.7 NMAC.

(2) 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 vapor combustor (Unit VC1).

(2) Monthly, inspect the BTEX condensers for proper routing to the vapor combustor (Unit VC1) and inspect the BTEX condensers and the vapor combustor (Unit VC1) 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 BTEX condensers and/or vapor combustor (Unit VC1) 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 vapor combustor (Unit VC1).

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

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

Requirement:
The units are subject to 40 CFR 63, Subpart HH and the permittee shall comply with all applicable requirements.

Monitoring:
The permittee shall monitor as required by 40 CFR 63.772(b)(2) to demonstrate facility is exempt from general standards.

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).

Reporting:
The permittee shall meet all applicable reporting in 40 CFR 63, Subparts A and HH and in Section B110.

F. 20.2.50 NMAC Glycol Dehydrators (Units DEHY1-3)

Requirement: The units are subject to 20.2.50 NMAC and the permittee shall comply with all applicable requirements, including the general provisions of 20.2.50.112 and the emission standards in 20.2.50.118.B. The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.118.B. The units shall comply with these emission standards

in accordance with the dates specified in 20.2.50.115.D(1).
Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.118.C, and in accordance with section B108 of this permit.
Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.118.D, and in accordance with section B109 of this permit.
Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.118.E, and in accordance with section B110 of this permit.

G. Control Devices used to comply with 20.2.50 NMAC (Units COND1-3 and VC1)

Requirement: All control devices and closed vent systems used to comply with 20.2.50 NMAC are subject to 20.2.50 NMAC and the permittee shall comply with all applicable requirements, including the general provisions of 20.2.50.112, the general requirements at 20.2.115.B and the requirements at 20.2.50.115.D(1).
Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.115.D(2), and in accordance with section B108 of this permit
Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.115.D(3), of 20.2.50.115.F, and in accordance with section B109 of this permit.
Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.115.D(4), of 20.2.50.115.G, and in accordance with section B110 of this permit.

A203 Tanks

A. Condensate Tank Throughput (Units OT1 - OT4)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by limiting the monthly rolling 12-month total condensate throughput to the units to 11,918,309 gallons per year (283,769 barrels/year)
Monitoring: The permittee shall monitor the monthly total throughput once per month.
Recordkeeping: The permittee shall record the monthly total throughput of liquids. Each month, during the first 12 months of monitoring, the permittee shall record the cumulative total liquid throughput and after the first 12 months of monitoring, the permittee shall calculate and record the monthly rolling 12-month total liquid throughput. Tank breathing and working emissions were calculated using the 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 also 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 unit to 5,300,501 gallons per year (126,202 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 gun barrel separator (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.

Gunbarrel 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:

(1) the name of the person conducting the inspections for defects and,

(2) the results of all monthly inspections, contemporaneously noting any maintenance or repairs needed to bring the gun barrel separator(s) into compliance with permit conditions.

Records shall be maintained in accordance with Section B109.

C. Truck Loading – Condensate Oil Loadout (Unit Load)

Requirement:

Compliance with the allowable emission limits in Table 106.A shall be demonstrated by limiting the total annual condensate loadout volume to 3,419,640 gallons per year (81,420 barrels/year).

Monitoring:

The permittee shall monitor the condensate oil truck loadout volume on a monthly basis.

Recordkeeping:

The permittee shall record the monthly condensate truck loadout volume. Each month during the first 12 months of monitoring the permittee shall record the cumulative 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.

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

D. 20.2.38 NMAC, Hydrocarbon Storage Facilities (Units OT1 - OT4)

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

E. Flares (Units FL1 and FL2): Control Device for Condensate Tanks (Units OT1 - OT4), Produced Water Tanks (Units WT1 - WT2), and Skim Tanks (Units SKT1 - SKT2)

Requirement: (1) The permittee shall install, operate, and maintain the flares (Units FL1 and FL2) according to the manufacturer's specifications. (2) The permittee shall ensure that all emissions from the Condensate Tanks (Units OT1 - OT4), Produced Water Tanks (Units WT1 - WT2), and Skim Tanks (Units SKT1 - SKT2) are at all times routed to a flare (Units FL1 and/or FL2). The permittee shall ensure that the Condensate Tanks (Units OT1 - OT4), Produced Water Tanks (Units WT1 - WT2), and Skim Tanks (Units SKT1 - SKT2) emissions do not vent to the atmosphere. During flare (Units FL1 and FL2) 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 FL1or FL2). (2) Monthly, inspect the Condensate Tanks (Units OT1 - OT4) and Skim Tanks (Units SKT1 - SKT2) for proper routing to a flare (Units FL1 or FL2) and inspect the Condensate (Units OT1 - OT4), Produced Water Tanks (Units WT1 - WT2), and Skim Tanks (Units SKT1 - SKT2) and the flares (Units FL1 or FL2) 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 Condensate Tanks (Units OT1 - OT4), Produced Water Tanks (Units WT1 - WT2), Skim Tanks (Units SKT1 - SKT2), and/or flares (Units FL1 or FL2) 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 or FL2).

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

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

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by capturing and routing the Low Pressure Separator (LPS) 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 LPS emissions shall be routed to Flares FL1 and/or FL2.

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.

Recordkeeping: The permittee shall record the results of the vapor recovery unit inspections chronologically, noting any maintenance or repairs that are required.

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

G. 20.2.50 NMAC Hydrocarbon Liquid Transfers (Unit LOAD)

Requirement: The unit is subject to 20.2.50 NMAC and the permittee shall comply with all applicable requirements, including the general provisions of 20.2.50.112 and the emission standards in 20.2.50.120.B. The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.120.A.

Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.120.C, and in accordance with section B108 of this permit

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.120.D, and in accordance with section B109 of this permit.

Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.120.E, and in accordance with section B110 of this permit.

A204 Heaters/Boilers

A. Operational Inspections of Boilers and/or Heaters (Units RB1 - RB3)

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.

(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: 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 and FL2)

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 the 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 Gas Flow Monitoring and Gas Analysis (Units FL1 and FL2)

Requirement: Compliance with the flare allowable emission limits in Table 106.A and Table 107.A shall be demonstrated by completing the monitoring, recordkeeping, and reporting required by this condition and Condition A206.C. All flow meters and inline chemical composition analyzers shall be installed, calibrated, operated and maintained in accordance with the requirements of Condition B108.H.

Monitoring:

(1) Gas Flow:

(a) One or more gas flowmeters equipped with a chart recorder or data logger (electronic storage) shall be installed to continuously monitor the flow (scf) of gas sent to the flare.

(b) Pilot, purge, and assist gas, if applicable, shall be monitored using a gas flowmeter under (a) or determined using manufacturer's specifications or engineering estimates.

(2) Gas Analysis:

(a) Once per calendar year, the permittee shall perform a gas analysis, including measurement of the total sulfur content, VOC content, and heating value (BTU/scf) of gas sent to the flare for combustion. Gas analyses shall be separated by a minimum of six (6) months.

(b) Alternatively, for H_2S only, in lieu of an annual analysis, H_2S may be measured quarterly using a stain tube(s) of the appropriate size range or with an inline chemical composition analyzer.

(3) Calibration: In addition to the requirements of Condition B108.H, flow meters and inline chemical composition analyzers shall be operated, calibrated, and maintained as specified by the site-specific operations and maintenance plan, if applicable.

Recordkeeping: The following records shall be maintained in accordance with Condition B109.

(1) Gas Flow:

(a) Records of continuous flowmeter measurements and the hourly flow rate in scf/hr calculated by averaging *a minimum* of four (4) equally spaced readings for each hour.

(b) Manufacturer's specifications or engineering estimates used for pilot, purge, and assist (if applicable) gas flow rates.

(2) Gas Analysis: All sample documentation received from the laboratory or testing service company, including H_2S content, the total sulfur content, the VOC content, and the heating value (BTU/scf), analysis method utilized, and sample chain of custody. If stain tubes are used for measuring H_2S content, records of the results, including size range of stain tubes used, the date of the test, and the name of the person conducting the test.

(3) Calibration: Records of all flowmeter and inline monitor certifications, calibrations, data capture calculations and documentation as specified by Condition B108.H, as well as any breakdowns, reasons for the breakdown, and corrective actions. The permittee shall also

maintain a copy of the manufacturer specifications for operation and calibration or the site-specific operations and maintenance plan for flowmeters and inline monitors.

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

C. Flare Emissions Calculation (Units FL1 and FL2)

Requirement: Compliance with the flare allowable emission limits in Table 106.A shall be demonstrated by operating the flare in accordance with the requirements, monitoring, and recordkeeping of Condition A206.B and completing emissions calculations as specified in this condition.

Monitoring: No monitoring is required. Compliance is demonstrated through records.

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 pounds per hour (pph) NOx, CO, VOC, SO_2, and H_2S emission rates 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.B;

(b) gas analysis, including H_2S content, total sulfur content, VOC content, and heating value (BTU/scf) of the gas from Condition A206.B;

(c) the emission factors represented in the permit application and approved by the Department, for NOx and CO emission rates; and

(d) VOC and H_2S 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 ton per year (tpy) emission rates as a monthly rolling 12-month total, using the totaled pph emission rates for each hour of the month:

(a) During the first 12 months of this condition taking effect, the permittee shall record the total tons of NOx, CO, VOC, SO_2, and H_2S emissions.

(b) After the first 12 months of this condition taking effect, the permittee shall record the monthly rolling 12-month total tpy NOx, CO, VOC, SO_2, and H_2S emissions.

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

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

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, (Vmax), shall be determined annually, and records kept demonstrating that the actual flare tip velocity does not exceed the allowable Vmax. Compliance shall be determined utilizing either method (a), (b), or (c) below:

The maximum permitted velocity (i.e., the greater of either calculated Vmax, 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/ft^3 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/ft^3 will be in compliance with this requirement.
(c) Actual tip velocity less than the calculated maximum velocity (Vmax) using the following equations will be in compliance with this requirement. The calculated Vmax shall be based on the weighted mean heating value of the inlet gas plus supplemental fuel gas.

Vmax of the flare shall be calculated annually and determined using the following equation:

Log*10* (V*max*)=(H*T* + 28.8)/31.7
V*max*=Maximum permitted velocity, M/sec
28.8=Constant
31.7=Constant

H*T*=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;

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

where the standard temperature for $\left(\frac{g\ mole}{scm}\right)$ 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 (H*T*) 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 <u>Sulfur Recovery Unit</u> – Not Required

A208 <u>Amine Unit</u> – Not Required

A209 <u>Fugitives</u>

A. 40 CFR 60, Subpart OOOOa – (Reciprocating Compressors associated with Units ENG1 - ENG9, ENG11 - ENG12)

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 60.5398a.
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 and 60.5415a(c).
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.

B. 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.

C. 20.2.50 NMAC Equipment Leaks and Fugitive Emissions (Unit FUG)

Requirement: The unit FUG is subject to 20.2.50 NMAC and the permittee shall comply with all applicable requirements, including the general provisions of 20.2.50.112, the requirements in 20.2.50.116.B, as well as the repair requirements under 20.2.50.116.E.
Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.116.C, 20.2.50.116.D (upon approval by the department), and in accordance with section B108 of this permit
Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.116.F, and in accordance with section B109 of this permit.
Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.116.G, and in accordance with section B110 of this permit.

D. 20.2.50 NMAC Pig Launchers and Receivers

Requirement: The Pig Launchers and Receivers are subject to 20.2.50 NMAC and the permittee shall comply with all applicable requirements, including the general provisions of 20.2.50.112 and the emission standards in 20.2.50.121.B. The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.121.B.
Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.121.C, and in accordance with section B108 of this permit
Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.121.D, and in accordance with section B109 of this permit.
Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.121.E, and in accordance with section B110 of this permit.

A210 Enclosed Combustion Device

A. VC1 Visible Emissions (Unit VC1)

Requirement: The permittee shall operate the VC1 such that no visible emissions are observed, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. Any emissions resulting from the unit VC1 downtime shall be submitted in accordance with 20.2.7 NMAC or counted toward the SSM emission limit, as applicable. Compliance with no visible emissions requirement constitutes compliance with 20.2.61 NMAC.
Monitoring: Annually, the permittee shall perform a Method 22 test to certify compliance with the visible emission requirement. The observation period shall be two hours.

Recordkeeping: The permittee shall record the results of Method 22 tests.
Reporting: The permittee shall report in accordance with Section B110.

B. VC1 Operations (Unit VC1)

Requirement: (1) The permittee shall install, operate, and maintain the unit VC1 according to the manufacturer's specifications. (2) 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 the unitVC1. (2) Continually, monitor the presence of the unit VC1 pilot flame using a thermocouple equipped with a continuous recorder and alarm or other equivalent device approved by the Department, to detect the presence of a flame.
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 Condensate Tanks (Units OT1-OT4), Skim Tank (Units SKT1 and SKT2), Low-Pressure Separator, Produced Water Tanks (Units WT1 and WT2), BTEX condensers (Units COND1-COND3) and/or the unit VC1 into compliance with permit conditions. (2) The permittee shall record the date, start time, and end time of any downtime and/or maintenance of the VC1.
Reporting: The permittee shall report in accordance with Section B110.

PART B GENERAL CONDITIONS (Attached)

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