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GOVERNOR

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CABINET SECRETARY

Air Quality Bureau
TITLE V OPERATING PERMIT
Issued under 20.2.70 NMAC

Certified Mail No: 7015 1520 0001 8091 1209

Return Receipt Requested

NSR Permit No: P293 Draft-Proposed 3/3/23
Facility Name: Spartan Compressor Station

Permittee Name: XTO Energy Inc
Mailing Address: 22777 Springwoods Village Parkway
W4.6B.374
Spring, TX 77389

TEMPO/IDEA ID No: 38274 - PRT20210001
AIRS No: 350151881

Permitting Action: Title V-new
Source Classification: PSD- Synthetic Minor, Title V-Major

Facility Location: UTM E 609500 m, UTM N 3563560 m, Zone 13,
Datum: NAD83
County: Eddy

Air Quality Bureau Contact Joseph Kimbrell
Main AQB Phone No. (505) 476-4300

TV Permit Expiration Date: _____

TV Renewal Application Due: _____

Liz Bisbey-Kuehn
Bureau Chief
Air Quality Bureau

Date

Template version: 06/28/2021

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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 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 13.5 miles southeast of Malaga, New Mexico in Eddy County. (20.2.70.302.A(7) NMAC)
- C. This is a new Title V permit that represents the facility as permitted in NSR Permit 7681M2 and adds applicability to 20.2.50 NMAC. The description of this modification is for informational purposes only and is not enforceable.
- 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 (NO _x)	213.9
Carbon Monoxide (CO)	242.0
Volatile Organic Compounds (VOC) ¹	270.0
Volatile Organic Compounds (VOC) excluding fugitives	217.7
Sulfur Dioxide (SO ₂)	21.9

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

Pollutant	Emissions (tons per year)
Particulate Matter (PM) ²	17.4
Particulate Matter 10 microns or less (PM ₁₀)	17.3
Particulate Matter 2.5 microns or less (PM _{2.5})	17.3
Greenhouse Gas (GHG) as CO ₂ e	263,110

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	5.3
Benzene	1.2
Formaldehyde	18.0
n-hexane	3.4
Total HAPs **	30.5

* 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: 7681M2 (Per 20.2.72 NMAC)	X	Entire Facility
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	Condensate tanks: OT1 to OT4
20.2.50 NMAC Ozone Precursor Pollutants	X	RICE units ENG1-9, ENG11-12; DEHY1-3; FL1-2; VRU1-2; VC1, FUG; LOAD; OT1-4; Natural Gas Driven Pneumatic Controllers and Pumps; Pig Launching and Receiving; and Compressor Seals, COND1-3

Table 103.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
20.2.61 NMAC Smoke and Visible Emissions	X	Compressor Engines: ENG1 – ENG9, ENG11 – ENG12, Flares: FL1 – FL3, Heaters and Reboilers: RB1 – 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 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	Fugitives: FUG, Compressor Engines: ENG1 – ENG9, ENG11 – ENG12
40 CFR 60, Subpart JJJJ	X	Engines: ENG1 – ENG6, ENG7 – ENG9 (TBD) ¹ , ENG11 – ENG12
40 CFR 60, Subpart OOOOa	X	Fugitives: FUG, Compressors for Engines: ENG1 – ENG6, ENG7 – ENG9 (TBD) ² , ENG11 – ENG12
40 CFR 63, Subpart A, General Provisions	X	Compressor Engines: ENG1 – ENG9, ENG11 – ENG12, Dehydrators: Units DEHY1 – DEHY3
40 CFR 63, Subpart HH	X	Dehydrators: Units DEHY1 – DEHY3
40 CFR 63, Subpart ZZZZ	X	Engines: ENG1 – ENG6, ENG7 – ENG9 (TBD) ¹ , ENG11 – ENG12

- B. Table 103.B lists requirements that are **not** applicable to this facility. This table only includes those requirements cited in the application as applicable and determined by the Department to be not applicable, or the Department determined that the requirement does not impose any conditions on a regulated piece of equipment.

Table 103.B: Non-Applicable Requirements

Non-Applicable Requirements	(1)	(2)	Justification For Non-Applicability
20.2.2 NMAC Definitions		X	
20.2.3 NMAC Ambient Air Quality Standards	X		
20.2.75 NMAC Construction Permit Fees		X	

1. Not Applicable For This Facility: No existing or planned operation/activity at this facility triggers the applicability of these requirements.
2. No Requirements: Although these regulations may apply, they do not impose any specific requirements on the operation of the facility as described in this permit.

C. 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 7681-M2.

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	Caterpillar	G3616	ZZY00909	1/1/2019	1/1/2019	5000
ENG2	Natural Gas Compressor Engine	Caterpillar	G3616	ZZY00830	12/1/2019	12/1/2019	5000
ENG3	Natural Gas Compressor Engine	Caterpillar	G3616	ZZY00831	1/1/2019	1/1/2019	5000
ENG4	Natural Gas Compressor Engine	Caterpillar	G3616	ZZY00853	2/1/2019	2/1/2019	5000
ENG5	Natural Gas Compressor Engine	Caterpillar	G3616	ZZY00916	1/1/2019	1/1/2019	5000
ENG6	Natural Gas Compressor Engine	Caterpillar	G3616	ZZY00908	11/1/2018	11/1/2018	5000
ENG7 ¹	Natural Gas Compressor Engine	Caterpillar	G3616	TBD	TBD	TBD	5000

Table 104.A: Regulated Sources List

Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity /Permitted Capacity
ENG8 ¹	Natural Gas Compressor Engine	Caterpillar	G3616	TBD	TBD	TBD	5000
ENG9 ¹	Natural Gas Compressor Engine	Caterpillar	G3616	TBD	TBD	TBD	5000
ENG11	Natural Gas Compressor Engine	Caterpillar	3516J TA	N6W01211	11/1/2018	11/1/2018	1380
ENG12	Natural Gas Compressor Engine	Caterpillar	3516J TA	N6W01043	10/1/2018	10/1/2018	1380
HTR1	Fuel Line Heater	TBD	TBD	11831	2019	2019	0.75 MMBtu/hr
RB1	Glycol Regenerator Reboiler	TBD	TBD	18-8806D-4	2018	2018	2.0 MMBtu/hr
RB2	Glycol Regenerator Reboiler	TBD	TBD	19-8825C-6	2019	2019	2.0 MMBtu/hr
RB3	Glycol Regenerator Reboiler	TBD	TBD	TBD	TBD	TBD	2.0 MMBtu/hr
FL1	Flare 1	Tornado	TBD	14718/17059	2019	2019	70 MMscf/d
FL2	Flare 2	Tornado	TBD	14740/17094	2019	2019	70 MMscf/d
FL3	Flare 3	Tornado	TBD	TBD	TBD	TBD	70 MMscf/d
SKT1	Skim Tank	Palmer	TK-5051	ST1942066	2019	2019	1000 bbl
SKT2	Skim Tank (Backup)	TBD	TBD	TBD	TBD	TBD	1000 bbl
OT1	Condensate Tank	Palmer	TK-5053	ST1942070	2019	2019	500 bbl
OT2	Condensate Tank	Palmer	TK-5054	ST19422071	2019	2019	500 bbl
OT3	Condensate Tank	Palmer	TK-5063	ST1942068	2019	2019	500 bbl
OT4	Condensate Tank	Palmer	TK-5064	ST1942069	2019	2019	500 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
WT1	Produced Water Tank	Palmer	TK-5052	ST1942067	2019	2019	500 bbl
WT2	Produced Water Tank	Palmer	TK-5062	ST19422072	2019	2019	500 bbl
VRU1	Low Pressure Separator VRU #1	TBD	NA	NA	2019	2019	125 HP
VRU2	Low Pressure Separator VRU Backup	TBD	NA	NA	2019	2019	125 HP
DEHY1	TEG Dehydrator with Condenser	TBD	TBD	CLB19-128	2019	2019	80 MMscfd
DEHY2	TEG Dehydrator with Condenser	TBD	TBD	CLB19-126	TBD	TBD	80 MMscfd
DEHY3	TEG Dehydrator with Condenser	TBD	TBD	TBD	TBD	TBD	80 MMscfd
LPS	Low Pressure Separator	TBD	TBD	19-007	2019	2019	N/A
LOAD	Condensate Truck Loading	N/A	N/A	N/A	N/A	N/A	1836 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
FL1 – FL3 SSM	SSM activity from Flares FL1 and FL3	N/A	N/A	N/A	N/A	N/A	N/A
DEHY1 SSM	SSM activity from dehydrator DEHY1	N/A	N/A	N/A	N/A	N/A	N/A
DEHY2 SSM	SSM activity from dehydrator DEHY2	N/A	N/A	N/A	N/A	N/A	N/A
DEHY3 SSM	SSM activity from dehydrator DEHY3	N/A	N/A	N/A	N/A	N/A	N/A

Table 104.A: Regulated Sources List

Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity /Permitted Capacity
NA	Natural Gas Driven Pneumatic Controllers and Pumps	NA	NA	NA	NA	NA	
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
COND1-3	BTEX condensers	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.

2. 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, and FL3) or a portion can be sent to each flare simultaneously. Any of the flares (Units FL1, FL2, and 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 High Pressure/Low Pressure Flare 1	VOC, HAP	Facility Inlet, OT1-OT4, WT1-WT2, SKTK1/SKTK2, LPS, DEHY1-3
FL2	Dual High Pressure/Low Pressure Flare 2	VOC, HAP	Facility Inlet, OT1-OT4, WT1-WT2, SKTK1/SKTK2, LPS, DEHY1-3
FL3	Dual High Pressure/Low Pressure Flare 3	VOC, HAP	Facility Inlet, OT1-OT4, WT1-WT2, SKTK1/SKTK2, LPS, DEHY1-3
VRU1	Low Pressure Separator VRU #1	VOC, HAPs	LPS
VRU2	Low Pressure Separator VRU Backup	VOC, HAPs	LPS
COND1-COND3	BTEX Condenser	VOC, HAP	DEHY1-DEHY3 still vents
RB1-RB3	Dehydrator Regenerator Reboiler	VOC, HAP	DEHY1-DEHY3 still vents

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
RB3	<	1.2	<	1.0	<	<	<	<	<	<	<	<
FL1-FL3 Pilot	1.4	6.2	2.8	12.4	1.9	8.5	0.02	0.1	0.1	0.3	0.1	0.3
FL1-FL3 Norm	2.4	9.7	4.9	19.4	16.3	33.4	0.3	1.1	0.05	0.2	0.05	0.2
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	-	-	-	-	*	10.1	-	-	-	-	-	-

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

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

3 Each flare (Units FL1, FL2, and FL3) is a dual pressure flare capable of accommodating high-pressure and low-pressure streams. High-pressure flare emissions are from high-pressure flare pilots and purge gas, equipment blowdowns, and inlet gas. All high-pressure flare emissions can be routed to one or more of the flares. Low-pressure flare emissions are from low-pressure flare pilots and purge gas as well as low-pressure vapors from condensate tanks (Units OT1-OT4), water tanks (WT1 and WT2), skim tanks (SKT1 and SKT2), and low-pressure separator (LPS). All low-pressure flare emissions can be routed to one or more of the flares. The facility's total gas produced can be sent to any flare (Units FL1, FL2, and FL3) or a portion can be sent to any flare. Any of the flares (Units FL1, FL2, and FL3) can flare gas in the case of an emergency. This footnote is for informational purposes and is not enforceable.

“-” 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 for Title V permits and B110.F for NSR Permits.

Table 106.B: 40 CFR 63, Subpart JJJJ for Units ENG1 – ENG 6, ENG7 – ENG9 (TBD) and ENG11 – ENG12

Engine type and fuel	Maximum engine power	Manufacture date	Emission Standard					
			g/hp-hr			ppmvd at 15% O ₂		
			NO _x	CO	VOC	NO _x	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) and Malfunction Emissions

- 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 and Malfunction Units, Activities, and Emission Limits

Unit No.	Description	NO _x pph	NO _x 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	¹ Compressor & Associated Piping	-	-	-	-	*	10.0	-	-	-	-

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

Unit No.	Description	NO _x pph	NO _x 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
	Blowdowns from ENG1-9, ENG11-12										
Malfunction	¹ Venting of Gas Due to Malfunction	-	-	-	-	*	10.0	-	-	-	-
FL1 – FL3 SSM	SSM activity from Flares FL1 and FL2	478.3	14.3	954.8	28.6	858.5	29.6	5.1	0.2	22.3	0.6
DEHY1 SSM ³	¹ SSM activity from dehydrator DEHY1	0.2	0.03	0.4	0.1	19.5	1.3	0.1	0.01	0.00	0.00
DEHY2 SSM ³	¹ SSM activity from dehydrator DEHY2	0.2	0.03	0.4	0.1	19.5	1.3	0.1	0.01	0.00	0.00
DEHY3 SSM ³	¹ SSM activity from dehydrator DEHY3	0.2	0.03	0.4	0.1	19.5	1.3	0.1	0.01	0.00	0.00

1. This authorization does not include VOC combustion emissions.
 “<” indicates the application represented that uncontrolled venting, blowdown, or pigging emissions of H₂S are less than 0.1 pph or 0.44 tpy. Allowable limits, monitoring, and recordkeeping are not required on this level of H₂S venting, blowdown, or pigging emissions.
 “*” indicates hourly emission limits are not appropriate for this operating situation.
 2. To report excess emissions for sources with no pound per hour and/or ton per year emission limits, see condition B110.E for Title V permits and B110.F for NSR Permits.
 3. The emissions are based on 300 hours per year combined operating time for all three dehydrators.
- 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: Compressor and piping blowdowns)

<p>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. (NSR 7681M2, Condition A107.C)</p>
<p>Monitoring: The permittee shall monitor the permitted routine and predictable startups and shutdowns and scheduled maintenance events.</p>
<p>Recordkeeping:</p> <ol style="list-style-type: none"> (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. 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 emission limits in Table 107.A. (NSR 7681M2, Condition A107.D)

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 B110.F, 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. DEHY SSM (DEHY1-DEHY3 & COND1-COND3 routed to reboilers RB1-RB3)

Requirement: To demonstrate compliance with the DEHY SSM in Table 107.A, the condenser vapors (COND1-COND3) shall be routed to the dehydrator reboilers (RB1-RB3) and combusted for no more than 300 hours per year. (NSR 7681M2, Condition A107.E)

Monitoring: The permittee shall monitor manually or electronically monitor 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.

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

F. SSM Flare (Flare SSM for FL1 – FL3)

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. (NSR 7681M2, Condition A107.F)

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, and H₂S 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) H₂S 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 NO_x and CO emission rates; and
- (d) VOC and H₂S 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 NO_x, CO, VOC, SO₂, and H₂S 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, and H₂S 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 April 1st and September 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 April 1st of each year.

A110 Facility: Fuel and Fuel Sulfur Requirements

- A. Fuel and Fuel Sulfur Requirements (Units ENG1 – ENG9, ENG11 – ENG12, RB1 – RB3 and 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. (NSR 7681M2, Condition A110.A)

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 Limit (Units ENG1 – ENG9, ENG11 – ENG12, RB1 – RB3 and 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. (NSR 7681M2, Condition A111.A)

Monitoring: 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: 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

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 – 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. (NSR 7681M2, Condition A201.A)

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 NO_x 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 ENG7 – ENG9)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by performing an initial compliance test. (NSR 7681M2, Condition A201.B)

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.

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

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

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)

<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.</p> <p>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. (NSR 7681M2, Condition A201.C)</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 ENG7 – ENG9 potentially)

<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 JJJJ (Units ENG1 – ENG6, ENG11 – ENG12)

<p>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.</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>

F. 40 CFR 63, Subpart ZZZZ (Units ENG7 – ENG9 potentially)

<p>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.</p>
<p>Monitoring: The permittee shall comply with all applicable monitoring requirements of 40 CFR 63, Subpart A and Subpart ZZZZ.</p>
<p>Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements of</p>

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 – ENG6, 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 that meet the applicability criteria in 20.2.50.111 and 20.2.50.113 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 compressor seals that meet the applicability criteria in 20.2.50.111 and 20.2.50.114 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.v
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**J. 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: (NSR 7681M2, Condition A202.A)

- (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.

K. 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). (NSR 7681M2, Condition A202.B)

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.

L. Control Device Inspection (Unit FL1 – FL3 and COND1 – COND3)

Requirement: Compliance with the allowable VOC emission limits in Table 106.A shall be demonstrated by: (NSR 7681M2, Condition A202.C)

- (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. Alternatively, vapors are routed to a flare (FL1-3) during SSM.
- (3) All the non-condensed hydrocarbon vapors resulting from the BTEX condensers (COND1 – COND3) shall be routed directly to and combusted at a flare (Unit FL1, FL2, or FL3). Alternatively, vapors are routed to the dehydrator reboiler for combustion during SSM.
- (4) The BTEX condensers (COND1 – COND3) and the flares (Units FL1, FL2, and FL3) shall be operational at all times that the facility is in operation. 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.

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.

M. 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.

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

Requirement: (NSR 7681M2, Condition A202.E)

- 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). The permittee shall ensure that the BTEX condenser 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 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.

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 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.

O. 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).
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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.
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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.
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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.

P. 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
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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.
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A203 Tanks

A. Condensate Tank 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 condensate throughput to the units to 28,144,368 gallons per year (670,104 barrels/year). (NSR 7681M2, Condition A203.A)
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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
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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 8,277,276 gallons per year (197,078 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. (NSR 7681M2, Condition A203.B)

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 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.

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

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 3,150,000 gallons per year (75,000 barrels/year). (NSR 7681M2, Condition A203.C)

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. (NSR 7681M2, Condition A203.D)

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 – FL3): Control Device for Condensate Tanks (Units OT1 – OT4), Produced Water Tanks (Units WT1 – WT2), and Skim Tanks (Units SKT1 – SKT2)

Requirement: (NSR 7681M2, Condition A203.E)

- (1) The permittee shall install, operate, and maintain the flares (Units FL1 – FL3) 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 flares (Units FL1 – FL3). 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 flares (Units FL1 – 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 flares (Units FL1 – FL3).
- (2) Monthly, inspect the Condensate Tanks (Units OT1 – OT4) and Skim Tanks (Units SKT1 – SKT2) for proper routing to flares (Units FL1 – FL3) and inspect the Condensate (Units OT1 – OT4), Produced Water Tanks (Units WT1 – WT2), and Skim Tanks (Units SKT1 – SKT2) and the flares (Units FL1 – 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 Condensate Tanks (Units OT1-4), Produced Water Tanks (Units WT1 – WT2), Skim Tanks (Units SKT1 – SKT2), and/or flares (Units FL1 – 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 – FL3).

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 – FL3))

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 – FL3). (NSR 7681M2, Condition A203.F)

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: (NSR 7681M2, Condition A204.A)

- (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.

<p>(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.</p> <p>(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.</p> <p>(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.</p>
<p>Monitoring:</p> <p>(1) Inspections shall be completed at least once per year or at the frequency recommended by the manufacturer.</p> <p>(2) At a minimum, inspections shall include the following:</p> <ul style="list-style-type: none"> (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.
<p>Recordkeeping:</p> <p>(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.</p> <p>(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.</p> <p>(3) The permittee shall maintain records in accordance with Section B109.</p>
<p>Reporting: The permittee shall report in accordance with Section B110.</p>

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. (NSR 7681M2, Condition A204.B)

A205 Turbines – Not Required

A206 Flares

A. Flare Flame & Visible Emissions (20.2.61 NMAC) (Units FL1 – FL3)

<p>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.</p> <p>The flares are subject to the 20% opacity standards in 20.2.61 NMAC and complying with the</p>

no visible emissions requirements demonstrates compliance with 20.2.61 NMAC opacity limit. (NSR 7681M2, Condition A206.A)

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 Gas Flow Monitoring and Gas Analysis (Units FL1 – FL3)

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. (NSR 7681M2, Condition A206.B)

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 H₂S only, in lieu of an annual analysis, H₂S 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 H₂S 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 H₂S 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 – FL3)

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. (NSR 7681M2, Condition A206.C)
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) NO _x , CO, VOC, SO ₂ , and H ₂ S 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 ₂ S 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 NO _x and CO emission rates; and
(d) VOC and H ₂ S 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 NO _x , CO, VOC, SO ₂ , and H ₂ S emissions.
(b) After the first 12 months of this condition taking effect, the permittee shall record the monthly rolling 12-month total tpy NO _x , CO, VOC, SO ₂ , and H ₂ S 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 – 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. (NSR 7681M2, Condition A206.D)
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/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/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;

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

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 – (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 at 60.5385a and 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 facility is subject to 40 CFR 60, Subparts A and OOOOa if the affected facility is constructed, modified, or reconstructed after the applicability date in 40 CFR 60.5365a and meets the applicability criteria specified at §60.5365a(j). The permittee shall comply with the notification requirements in Subpart A and the specific requirements of Subpart OOOOa, including standards in §60.5397a.

Monitoring: The permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to §60.5397a (or §60.5398a as approved by the US EPA), §60.5410a, and §60.5415a.

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

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.

<p>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.</p>
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D. 20.2.50 NMAC Natural Gas Driven Pneumatic Controllers and Pumps

<p>Requirement: The Natural Gas Driven Pneumatic Controllers and Pumps that meet the applicability criteria in 20.2.50.111 and 20.2.50.122 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 20.2.50.122.B. The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.122.B.</p>

<p>Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.122.C, and in accordance with section B108 of this permit</p>
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<p>Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.122.D, and in accordance with section B109 of this permit.</p>

<p>Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.122.E, and in accordance with section B110 of this permit.</p>
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E. 20.2.50 NMAC Pig Launchers and Receivers

<p>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.</p>
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<p>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</p>
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<p>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.</p>

<p>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.</p>
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PART B GENERAL CONDITIONS (Attached)

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

Air Quality Bureau
TITLE V OPERATING PERMIT
Issued under 20.2.70 NMAC

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PART B GENERAL CONDITIONS

B100 Introduction

A. Not Applicable

B101 Legal

A. Permit Terms and Conditions (20.2.70 sections 7, 201.B, 300, 301.B, 302, 405 NMAC)

- (1) The permittee shall abide by all terms and conditions of this permit, except as allowed under Section 502(b)(10) of the Federal Act, and 20.2.70.302.H.1 NMAC. Any permit noncompliance is grounds for enforcement action, and significant or repetitious noncompliance may result in termination of this permit. Additionally, noncompliance with federally enforceable conditions of this permit constitutes a violation of the Federal Act. (20.2.70.302.A.2.a NMAC)
- (2) Emissions trading within a facility (20.2.70.302.H.2 NMAC)
 - (a) The Department shall, if an applicant requests it, issue permits that contain terms and conditions allowing for the trading of emissions increases and decreases in the permitted facility solely for the purpose of complying with a federally enforceable emissions cap that is established in the permit in addition to any applicable requirements. Such terms and conditions shall include all terms and conditions required under 20.2.70.302 NMAC to determine compliance. If applicable requirements apply to the requested emissions trading, permit conditions shall be issued only to the extent that the applicable requirements provide for trading such increases and decreases without a case-by-case approval.
 - (b) The applicant shall include in the application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable. The Department shall not include in the emissions trading provisions any emissions units for which emissions are not quantifiable or for which there are no replicable procedures to enforce the emissions trades. The permit shall require compliance with all applicable requirements.
- (3) It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (20.2.70.302.A.2.b NMAC)
- (4) If the Department determines that cause exists to modify, reopen and revise, revoke and reissue, or terminate this permit, this shall be done in accordance with 20.2.70.405 NMAC. (20.2.70.302.A.2.c NMAC)
- (5) The permittee shall furnish any information the Department requests in writing to determine if cause exists for reopening and revising, revoking and reissuing, or

terminating the permit, or to determine compliance with the permit. This information shall be furnished within the time period specified by the Department. Additionally, the permittee shall furnish, upon request by the Department, copies of records required by the permit to be maintained by the permittee. (20.2.70.302.A.2.f NMAC)

- (6) A request by the permittee that this permit be modified, revoked and reissued, or terminated, or a notification by the permittee of planned changes or anticipated noncompliance, shall not stay any conditions of this permit. (20.2.70.302.A.2.d NMAC)
- (7) This permit does not convey property rights of any sort, or any exclusive privilege. (20.2.70.302.A.2.e NMAC)
- (8) In the case where an applicant or permittee has submitted information to the Department under a claim of confidentiality, the Department may also require the applicant or permittee to submit a copy of such information directly to the Administrator of the EPA. (20.2.70.301.B NMAC)
- (9) The issuance of this permit, or the filing or approval of a compliance plan, does not relieve the permittee from civil or criminal liability for failure to comply with the state or Federal Acts, or any applicable state or federal regulation or law. (20.2.70.302.A.6 NMAC and the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2)
- (10) If any part of this permit is challenged or held invalid, the remainder of the permit terms and conditions are not affected and the permittee shall continue to abide by them. (20.2.70.302.A.1.d NMAC)
- (11) A responsible official (as defined in 20.2.70.7.AE NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. (20.2.70.300.E NMAC)
- (12) Revocation or termination of this permit by the Department terminates the permittee's right to operate this facility. (20.2.70.201.B NMAC)
- (13) The permittee shall continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit, the permittee shall meet such requirements on a timely basis. (Sections 300.D.10.c and 302.G.3 of 20.2.70 NMAC)

B. Permit Shield (20.2.70.302.J NMAC)

- (1) Compliance with the conditions of this permit shall be deemed to be compliance with any applicable requirements existing as of the date of permit issuance and identified in [Table 103.A](#). The requirements in [Table 103.A](#) are applicable to this facility with specific requirements identified for individual emission units.

- (2) The Department has determined that the requirements in [Table 103.B](#) as identified in the permit application are not applicable to this source, or they do not impose any conditions in this permit.
 - (3) This permit shield does not extend to administrative amendments (Subsection A of 20.2.70.404 NMAC), to minor permit modifications (Subsection B of 20.2.70.404 NMAC), to changes made under Section 502(b)(10), changes under Paragraph 1 of subsection H of 20.2.70.302 of the Federal Act, or to permit terms for which notice has been given to reopen or revoke all or part under 20.2.70.405 and 20.2.70.302J(6).
 - (4) This permit shall, for purposes of the permit shield, identify any requirement specifically identified in the permit application or significant permit modification that the department has determined is not applicable to the source, and state the basis for any such determination. (20.2.70.302.A.1.f NMAC)
- C. The owner or operator of a source having an excess emission shall, to the extent practicable, operate the source, including associated air pollution control equipment, in a manner consistent with good air pollutant control practices for minimizing emissions. (20.2.7.109 NMAC). The establishment of allowable malfunction emission limits does not supersede this requirement.

B102 Authority

- A. This permit is issued pursuant to the federal Clean Air Act ("Federal Act"), the New Mexico Air Quality Control Act ("State Act") and regulations adopted pursuant to the State and Federal Acts, including Title 20, New Mexico Administrative Code, Chapter 2, Part 70 (20.2.70 NMAC) - Operating Permits.
- B. This permit authorizes the operation of this facility. This permit is valid only for the named permittee, owner, and operator. A permit modification is required to change any of those entities.
- C. The Department specifies with this permit, terms and conditions upon the operation of this facility to assure compliance with all applicable requirements, as defined in 20.2.70 NMAC at the time this permit is issued. (20.2.70.302.A.1 NMAC)
- D. Pursuant to the New Mexico Air Quality Control Act NMSA 1978, Chapter 74, Article 2, all terms and conditions in this permit, including any provisions designed to limit this facility's potential to emit, are enforceable by the Department. All terms and conditions are enforceable by the Administrator of the United States Environmental Protection Agency ("EPA") and citizens under the Federal Act, unless the term or condition is specifically designated in this permit as not being enforceable under the Federal Act. (20.2.70.302.A.5 NMAC)

- E. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the Modification and Exceptions of Section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

B103 Annual Fee

- A. The permittee shall pay Title V fees to the Department consistent with the fee schedule in 20.2.71 NMAC - Operating Permit Emission Fees. The fees will be assessed and invoiced separately from this permit. (20.2.70.302.A.1.e NMAC)

B104 Appeal Procedures
(20.2.70.403.A NMAC)

- A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for a hearing before the Environmental Improvement Board ("board"). The petition shall be made in writing to the board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered, and attach a copy of the permitting action for which review is sought. Unless a timely request for a hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to:

For Mailing:

Administrator, New Mexico Environmental Improvement Board
P.O. Box 5469
Santa Fe, NM 87502-5469

For Hand Delivery:

Administrator, New Mexico Environmental Improvement Board
1190 St. Francis Drive, Harold Runnels Bldg.
Santa Fe, New Mexico 87505

B105 Submittal of Reports and Certifications

- A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to the Air Quality Bureau Compliance Reporting (AQBCR) system or as directed by the Department.
- B. Excess Emission Reports shall be submitted as directed by the Department. (20.2.7.110 NMAC)
- C. Compliance Certification Reports, Semi-Annual monitoring reports, compliance schedule progress reports, and any other compliance status information required by this permit shall

be certified by the responsible official and submitted to the mailing address below, or as directed by the Department:

Manager, Compliance and Enforcement Section
New Mexico Environment Department
Air Quality Bureau
525 Camino de los Marquez Suite 1
Santa Fe, NM 87505-1816

- D. Compliance Certification Reports shall also be submitted to the Administrator at the address below (20.2.70.302.E.3 NMAC):

Chief, Air Enforcement Section
US EPA Region-6, R6 ECD-A
1201 Elm Street, Suite 500
Dallas, TX 75270

B106 NSPS and/or MACT Startup, Shutdown, and Malfunction Operations

- A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c).
- B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3), unless specifically exempted in the applicable subpart. (20.2.70.302.A.1 and A.4 NMAC)

B107 Startup, Shutdown, and Maintenance Operations

- A. The establishment of permitted startup, shutdown, and maintenance (SSM) emission limits does not supersede the requirements of 20.2.7.14.A NMAC. Except for operations or equipment subject to Condition B106, the permittee shall establish and implement a plan to minimize emissions during routine or predictable start up, shut down, and scheduled maintenance (SSM work practice plan) and shall operate in accordance with the procedures set forth in the plan. (20.2.7.14.A NMAC)

B108 General Monitoring Requirements
(20.2.70.302.A and C NMAC)

- A. These requirements do not supersede or relax requirements of federal regulations.
- B. The following monitoring and/or testing requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.
- C. If the emission unit is shutdown at the time when periodic monitoring is due to be completed, the permittee is not required to restart the unit for the sole purpose of conducting the monitoring. Using electronic or written mail, the permittee shall notify the Department's Compliance and Enforcement Section of a delay in emission tests prior to the deadline for completing the tests. Upon recommencing operation, the permittee shall submit pre-test notification(s) to the Department's Compliance and Enforcement Section and shall complete the monitoring.
- D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke monitoring period exemptions at B108.D(2), hours of operation shall be monitored and recorded.
- (1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.
 - (2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.
 - (3) If invoking the monitoring period exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during the five year term of this permit.
- E. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will

be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.

- F. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.
- G. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance. All monitoring periods, unless stated otherwise in the specific permit condition or federal requirement, shall commence at the beginning of the 12 month reporting period as defined at condition A109.B.
- H. Unless otherwise indicated by Specific Conditions or regulatory requirements, all instrumentation used for monitoring in accordance with applicable requirements including emission limits, to measure parameters including but not limited to flow, temperature, pressure and chemical composition, or used to continuously monitor emission rates and/or other process operating parameters, shall be subject to the following requirements:
 - (1) The owner or operator shall install, calibrate, operate and maintain monitoring instrumentation (monitor) according to the manufacturer's procedures and specifications and the following requirements.
 - (a) The monitor shall be located in a position that provides a representative measurement of the parameter that is being monitored.
 - (b) At a minimum, the monitor shall complete one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
 - (c) At a minimum, the monitor shall be spanned to measure the normal range +/- 5% of the parameter that is being monitored.
 - (d) At least semi-annually, perform a visual inspection of all components of the monitor for physical and operational integrity and all electrical connections for oxidation and galvanic corrosion.
 - (e) Recalibrate the monitor in accordance with the manufacturer's procedures and specifications at the frequency specified by the manufacturer, or every two years, whichever is less.
 - (2) Except for malfunctions, associated repairs, and required quality assurance or control activities (including calibration checks and required zero and span adjustments), the permittee shall operate and maintain all monitoring equipment at all times that the emissions unit or the associated process is operating.

- (3) The monitor shall measure data for a minimum of 90 percent of the time that the emissions unit or the associated process is in operation, based on a calendar monthly average.
 - (4) The owner or operator shall maintain records in accordance with Section B109 to demonstrate compliance with the requirements in B108H (1)-(3) above, as applicable.
- I. The permittee is not required to report a deviation for any monitoring or testing in a Specific Condition if the deviation was authorized in this General Condition [B108](#).

B109 General Recordkeeping Requirements
(20.2.70.302.D NMAC)

- A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any applicable requirements that become effective during the term of this permit. The minimum information to be included in these records is as follows (20.2.70.302.D.1 NMAC):
- (1) Records required for testing and sampling:
 - (a) equipment identification (include make, model and serial number for all tested equipment and emission controls)
 - (b) date(s) and time(s) of sampling or measurements
 - (c) date(s) analyses were performed
 - (d) the qualified entity that performed the analyses
 - (e) analytical or test methods used
 - (f) results of analyses or tests
 - (g) operating conditions existing at the time of sampling or measurement
 - (2) Records required for equipment inspections and/or maintenance required by this permit:
 - (a) equipment identification number (including make, model and serial number)
 - (b) date(s) and time(s) of inspection, maintenance, and/or repair
 - (c) date(s) any subsequent analyses were performed (if applicable)
 - (d) name of the person or qualified entity conducting the inspection, maintenance, and/or repair
 - (e) copy of the equipment manufacturer's or the owner or operator's maintenance or repair recommendations (if required to demonstrate compliance with a permit condition)
 - (f) description of maintenance or repair activities conducted

- (g) all results of any required parameter readings
 - (h) a description of the physical condition of the equipment as found during any required inspection
 - (i) results of required equipment inspections including a description of any condition which required adjustment to bring the equipment back into compliance and a description of the required adjustments
- B. The permittee shall keep records of all monitoring data, equipment calibration, maintenance, and inspections, Data Acquisition and Handling System (DAHS) if used, reports, and other supporting information required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record shall clearly identify the emissions unit and/or monitoring equipment, and the date the data was gathered. (20.2.70.302.D.2 NMAC)
- C. If the permittee has applied and received approval for an alternative operating scenario, then the permittee shall maintain a log at the facility, which documents, contemporaneously with any change from one operating scenario to another, the scenario under which the facility is operating. (20.2.70.302.A.3 NMAC)
- D. The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. (20.2.70.302.I.2 NMAC)
- E. Unless otherwise indicated by Specific Conditions, the permittee shall keep the following records for malfunction emissions and routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):
 - (1) The owner or operator of a source subject to a permit, shall establish and implement a plan to minimize emissions during routine or predictable startup, shutdown, and scheduled maintenance through work practice standards and good air pollution control practices. This requirement shall not apply to any affected facility defined in and subject to an emissions standard and an equivalent plan under 40 CFR Part 60 (NSPS), 40 CFR Part 63 (MACT), or an equivalent plan under 20.2.72 NMAC - Construction Permits, 20.2.70 NMAC - Operating Permits, 20.2.74 NMAC - Permits - Prevention of Significant Deterioration (PSD), or 20.2.79 NMAC - Permits - Nonattainment Areas. (20.2.7.14.A NMAC) The permittee shall keep records of all sources subject to the plan to minimize emissions during routine or predictable SSM and shall record if the source is subject to an alternative plan and therefore, not subject to the plan requirements under 20.2.7.14.A NMAC.
 - (2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, a description of the event, and a description of the cause of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that

occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.

- (3) If the facility has allowable malfunction emission limits in this permit, the permittee shall record all malfunction events to be applied against these limits. The permittee shall also include the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown. A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction. (20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard. The most stringent requirement applies. This authorization only allows the permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized malfunction emission limit.
- (4) The owner or operator of a source shall meet the operational plan defining the measures to be taken to mitigate source emissions during malfunction, startup or shutdown. (20.2.72.203.A(5) NMAC)

B110 General Reporting Requirements
(20.2.70.302.E NMAC)

- A. Reports of required monitoring activities for this facility shall be submitted to the Department on the schedule in section A109. Monitoring and recordkeeping requirements that are not required by a NSPS or MACT shall be maintained on-site or (for unmanned sites) at the nearest company office, and summarized in the semi-annual reports, unless alternative reporting requirements are specified in the equipment specific requirements section of this permit.
- B. Reports shall clearly identify the subject equipment showing the emission unit ID number according to this operating permit. In addition, all instances of deviations from permit requirements, including those that occur during emergencies, shall be clearly identified in the reports required by section A109. (20.2.70.302.E.1 NMAC)
- C. The permittee shall submit reports of all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. These reports shall be submitted as follows:
 - (1) Deviations resulting in excess emissions as defined in 20.2.7.7 NMAC (including those classified as emergencies as defined in section B114.A) shall be reported in

accordance with the timelines specified by 20.2.7.110 NMAC and in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC)

- (2) All other deviations shall be reported in the semi-annual reports required in section A109. (20.2.70.302.E.2 NMAC).
- D. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.
- E. Allowable Emission Limits for Excess Emissions Reporting for Flares and Other Regulated Sources with No Pound per Hour (pph) and/or Ton per Year (tpy) Emission Limits.
- (1) When a flare has no allowable pph and/or tpy emission limits in Sections A106 and/or A107, the authorized allowable emissions include only the combustion of pilot and/or purge gas. Compliance is demonstrated by limiting the gas stream to the flare to only pilot and/or purge gas.
 - (2) For excess emissions reporting as required by 20.2.7 NMAC, the allowable emission limits are 1.0 pph and 1.0 tpy for each regulated air pollutant (except for H₂S) emitted by that source as follows:
 - (a) For flares, when there are no allowable emission limits in Sections A106 and/or A107.
 - (b) For regulated sources with emission limits in Sections A106 or A107 represented by the less than sign (“<”).
 - (c) For regulated sources that normally would not emit any regulated air pollutants, including but not limited to vents, pressure relief devices, connectors, etc.
 - (3) For excess emissions reporting as required by 20.2.7 NMAC for H₂S, the allowable limits are 0.1 pph and 0.44 tpy for each applicable scenario addressed in paragraph (2) above.
- F. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the full accuracy inherent in the testing instrument or Method test used to obtain the data shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.
- G. At such time as new units are installed as authorized by the applicable NSR Permit, the permittee shall fulfill the notification requirements in the NSR permit.
- H. Periodic Emissions Test Reporting: The permittee shall report semi-annually a summary of the test results.

- I. The permittee shall submit an emissions inventory report for this facility in accordance with the schedule in subparagraph (5), provided one or more of the following criteria is met in subparagraphs (1) to (4): (20.2.73 NMAC)
- (1) The facility emits, or has the potential to emit, 5 tons per year or more of lead or lead compounds, or 100 tons per year or more of PM10, PM2.5, sulfur oxides, nitrogen oxides, carbon monoxide, or volatile organic compounds.
 - (2) The facility is defined as a major source of hazardous air pollutants under 20.2.70 NMAC (Operating Permits).
 - (3) The facility is located in an ozone nonattainment area and which emits, or has the potential to emit, 25 tons per year or more of nitrogen oxides or volatile organic compounds.
 - (4) Upon request by the department.
 - (5) The permittee shall submit the emissions inventory report by April 1 of each year, unless a different deadline is specified by the current operating permit.
- J. Emissions trading within a facility (20.2.70.302.H.2 NMAC)
- (1) For each such change, the permittee shall provide written notification to the department and the administrator at least seven (7) days in advance of the proposed changes. Such notification shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.
 - (2) The permittee and department shall attach each such notice to their copy of the relevant permit.

B111 General Testing Requirements

Unless otherwise indicated by Specific Conditions or regulatory requirements, the permittee shall conduct testing in accordance with the requirements in Sections B111A, B, C, D and E, as applicable.

A. Initial Compliance Tests

The permittee shall conduct initial compliance tests in accordance with the following requirements:

- (1) Initial compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)
- (2) Initial compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then

the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.

- (3) The default time period for each test run shall be at least 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.
- (4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate.
- (5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.
- (6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.

B. EPA Reference Method Tests

The test methods in Section B111.B(1) shall be used for all initial compliance tests and all Relative Accuracy Test Audits (RATAs), and shall be used if a permittee chooses to use EPA test methods for periodic monitoring. Test methods that are not listed in Section B111.B(1) may be used in accordance with the requirements at Section B111.B(2).

- (1) All compliance tests required by this permit shall be conducted in accordance with the requirements of CFR Title 40, Part 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by CFR Title 40, Part 60, Appendix A:
 - (a) Methods 1 through 4 for stack gas flowrate
 - (b) Method 5 for particulate matter (PM)
 - (c) Method 6C for SO₂
 - (d) Method 7E for NO_x (test results shall be expressed as nitrogen dioxide (NO₂) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO₂ is equivalent to 1.194×10^{-7} lb/SCF))
 - (e) Method 9 for visual determination of opacity
 - (f) Method 10 for CO

- (g) Method 19 for particulate, sulfur dioxide and nitrogen oxides emission rates. In addition, Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate. The permittee shall provide a contemporaneous fuel gas analysis (preferably on the day of the test, but no earlier than three months prior to the test date) and a recent fuel flow meter calibration certificate (within the most recent quarter) with the final test report.
 - (h) Method 7E or 20 for Turbines per §60.335 or §60.4400
 - (i) Method 22 for visual determination of fugitive emissions from material sources and smoke emissions from flares
 - (j) Method 25A for VOC reduction efficiency
 - (k) Method 29 for Metals
 - (l) Method 30B for Mercury from Coal-Fired Combustion Sources Using Carbon Sorbent Traps
 - (m) Method 201A for filterable PM₁₀ and PM_{2.5}
 - (n) Method 202 for condensable PM
 - (o) Method 320 for organic Hazardous Air Pollutants (HAPs)
- (2) Permittees may propose test method(s) that are not listed in Section B111.B(1). These methods may be used if prior approval is received from the Department.

C. Periodic Monitoring and Portable Analyzer Requirements for the Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters

Periodic emissions tests (periodic monitoring) shall be conducted in accordance with the following requirements:

- (1) Periodic emissions tests may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer. Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of the current version of ASTM D 6522. However, if a facility has met a previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.
- (2) The default time period for each test run shall be **at least** 20 minutes.
Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.
- (3) Testing of emissions shall be conducted in accordance with the requirements at Section B108.E.
- (4) During emissions tests, pollutant and diluent concentration shall be monitored and recorded. Fuel flow rate shall be monitored and recorded if stack gas flow rate is

determined utilizing Reference Method 19. This information shall be included with the test report furnished to the Department.

- (5) Stack gas flow rate shall be calculated in accordance with Reference Method 19 utilizing fuel flow rate (scf) determined by a dedicated fuel flow meter and fuel heating value (Btu/scf). The permittee shall provide a contemporaneous fuel gas analysis (preferably on the day of the test, but no earlier than three months prior to the test date) and a recent fuel flow meter calibration certificate (within the most recent quarter) with the final test report. Alternatively, stack gas flow rate may be determined by using EPA Reference Methods 1-4.
- (6) The permittee shall submit a notification and protocol for periodic emissions tests upon the request of the Department.

D. Initial Compliance Test and RATA Procedures

Permittees required to conduct initial compliance tests and/or RATAs shall comply with the following requirements:

- (1) The permittee shall submit a notification and test protocol to the Department's Program Manager, Compliance and Enforcement Section, at least thirty (30) days before the test date and allow a representative of the Department to be present at the test. Proposals to use test method(s) that are not listed in Section B111.B(1) (if applicable) shall be included in this notification.
- (2) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.
- (3) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.
- (4) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed

E. General Compliance Test Procedures

The following requirements shall apply to all initial compliance and periodic emissions tests and all RATAs:

- (1) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.
- (2) The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Reference Method 1 or the current version of ASTM D 6522, as applicable.

- (3) Test reports shall be submitted to the Department no later than 30 days after completion of the test.

B112 Compliance

- A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)
- B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.70.302.G.3 NMAC)
- C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit. (20.2.70.302.A.1 and G.3 NMAC)
- D. The permittee shall submit compliance certification reports certifying the compliance status of this facility with respect to all permit terms and conditions, including applicable requirements. These reports shall be made on the pre-populated Compliance Certification Report Form that is provided to the permittee by the Department, and shall be submitted to the Department and to EPA at least every 12 months. For the most current form, please contact the Compliance Reports Group at: submittals.aqb@state.nm.us. For additional reporting guidance see <https://www.env.nm.gov/air-quality/compliance-submittal-forms/> (20.2.70.302.E.3 NMAC)
- E. The permittee shall allow representatives of the Department, upon presentation of credentials and other documents as may be required by law, to do the following (20.2.70.302.G.1 NMAC):
 - (1) enter the permittee's premises where a source or emission unit is located, or where records that are required by this permit to be maintained are kept;
 - (2) have access to and copy, at reasonable times, any records that are required by this permit to be maintained;

- (3) inspect any facilities, equipment (including monitoring and air pollution control equipment), work practices or operations regulated or required under this permit; and
- (4) sample or monitor any substances or parameters for the purpose of assuring compliance with this permit or applicable requirements or as otherwise authorized by the Federal Act.

B113 Permit Reopening and Revocation

- A. This permit will be reopened and revised when any one of the following conditions occurs, and may be revoked and reissued when A(3) or A(4) occurs. (20.2.70.405.A.1 NMAC)
- (1) Additional applicable requirements under the Federal Act become applicable to a major source three (3) or more years before the expiration date of this permit. If the effective date of the requirement is later than the expiration date of this permit, then the permit is not required to be reopened unless the original permit or any of its terms and conditions has been extended due to the Department's failure to take timely action on a request by the permittee to renew this permit.
 - (2) Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the Federal Act (the acid rain program). Upon approval by the Administrator, excess emissions offset plans will be incorporated into this permit.
 - (3) The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms and conditions of the permit.
 - (4) The Department or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with an applicable requirement.
- B. Proceedings to reopen or revoke this permit shall affect only those parts of this permit for which cause to reopen or revoke exists. Emissions units for which permit conditions have been revoked shall not be operated until new permit conditions have been issued for them. (20.2.70.405.A.2 NMAC)

B114 Emergencies

(20.2.70.304 NMAC)

- A. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.

- B. An emergency constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations contained in this permit if the permittee has demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) This facility was at the time being properly operated;
 - (3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
 - (4) The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of 20.2.70.302.E.2 NMAC. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- C. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- D. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

B115 Stratospheric Ozone
(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to 40 CFR 82, Subpart F, the permittee shall comply with the following standards for recycling and emissions reductions:
- (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices, except for motor vehicle air conditioners (MVAC) and MVAC-like appliances. (40 CFR 82.156)
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment. (40 CFR 82.158)
 - (3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program. (40 CFR 82.161)

B116 Acid Rain Sources
(20.2.70.302.A.9 NMAC)

- A. If this facility is subject to the federal acid rain program under 40 CFR 72, this section applies.

- B. Where an applicable requirement of the Federal Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Federal Act, both provisions are incorporated into this permit and are federally enforceable.
- C. Emissions exceeding any allowances held by the permittee under Title IV of the Federal Act or the regulations promulgated thereunder are prohibited.
- D. No modification of this permit is required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit modification under any other applicable requirement.
- E. The permittee may not use allowances as a defense to noncompliance with any other applicable requirement.
- F. No limit is placed on the number of allowances held by the acid rain source. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Federal Act.
- G. The acid rain permit is an enclosure of this operating permit.

B117 Risk Management Plan
(20.2.70.302.A.1 NMAC)

- A. If this facility is subject to the federal risk management program under 40 CFR 68, this section applies.
- B. The owner or operator shall certify annually that they have developed and implemented a RMP and are in compliance with 40 CFR 68.
- C. If the owner or operator of the facility has not developed and submitted a risk management plan according to 40 CFR 68.150, the owner or operator shall provide a compliance schedule for the development and implementation of the plan. The plan shall describe, in detail, procedures for assessing the accidental release hazard, preventing accidental releases, and developing an emergency response plan to an accidental release. The plan shall be submitted in a method and format to a central point as specified by EPA prior to the date specified in 40 CFR 68.150.b.

PART C MISCELLANEOUS**C100 Supporting On-Line Documents**

- A. Copies of the following documents can be downloaded from NMED's web site under Compliance and Enforcement or requested from the Bureau.
- (1) Excess Emission Form (for reporting deviations and emergencies)
 - (2) Compliance Certification Report Form
 - (3) Universal Stack Test Notification, Protocol and Report Form and Instructions

C101 Definitions

- A. **"Daylight"** is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at <http://aa.usno.navy.mil/>. Alternatively, these times can be obtained from a Farmers Almanac or from <http://www.almanac.com/rise/>).
- B. **"Decommission"** and **"Decommissioning"** applies to units left on site (not removed) and is defined as the complete disconnecting of equipment, emission sources or activities from the process by disconnecting all connections necessary for operation (i.e. piping, electrical, controls, ductwork, etc.).
- C. **"Exempt Sources"** and **"Exempt Activities"** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 permitting action.
- D. **"Fugitive emission"** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. (20.2.70.7M NMAC)
- E. **"Insignificant Activities"** means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate. (20.2.70.7Q NMAC)
- F. **"Malfunction"** for the requirements under 20.2.7 NMAC, means any sudden and unavoidable failure of air pollution control equipment or process equipment beyond the control of the owner or operator, including malfunction during startup or shutdown. A failure that is caused entirely or in part by poor maintenance, careless operation, or any other preventable equipment breakdown shall not be considered a malfunction.
- G. **"Natural Gas"** is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either

composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.331)

- H. **“Natural Gas Liquids”** means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)
- I. **“National Ambient Air Quality Standards”** means the primary (health-based) and secondary (welfare-related) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act. (20.2.72.7Q NMAC)
- J. **“NO₂”** or **“Nitrogen dioxide”** means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term **“nitrogen dioxide,”** for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NO_x or NO₂. (20.2.2.7U NMAC)
- K. **“NO_x”** see NO₂
- L. **“Paved Road”** is a road with a permanent solid surface that can be swept essentially free of dust or other material to reduce air re-entrainment of particulate matter. To the extent these surfaces remain solid and contiguous they qualify as paved roads: concrete, asphalt, chip seal, recycled asphalt and other surfaces approved by the Department in writing.
- M. **“Potential Emission Rate”** means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the Federal Act. (20.2.72.7Y NMAC)
- N. **“Restricted Area-Non Military”** is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.
- O. **“Shutdown”** for requirements under 20.2.72.7BB NMAC, means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.

- P. **"SSM"** for requirements under 20.2.7 NMAC, means routine or predictable startup, shutdown, or scheduled maintenance.
 - (1) **"Shutdown"** for requirements under 20.2.7.7H NMAC, means the cessation of operation of any air pollution control equipment or process equipment.
 - (2) **"Startup"** for requirements under 20.2.7.7I NMAC, means the setting into operation of any air pollution control equipment or process equipment.

- Q. **"Startup"** for requirements under 20.2.72.7DD NMAC, means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

C102 Acronyms

2SLB	2-stroke lean burn
4SLB	4-stroke lean burn
4SRB	4-stroke rich burn
acfm	actual cubic feet per minute
AFR	air fuel ratio
AP-42	EPA Air Pollutant Emission Factors
AQB	Air Quality Bureau
AQCR	Air Quality Control Region
ASTM	American Society for Testing & Materials
Btu	British thermal unit
CAA	Clean Air Act of 1970 and 1990 Amendments
CEM	continuous emissions monitoring
cfh	cubic feet per hour
cfm	cubic feet per minute
CFR	Code of Federal Regulation
CI	compression ignition
CO	carbon monoxide
COMS	continuous opacity monitoring system
EIB	Environmental Improvement Board
EPA	United States Environmental Protection Agency
gr/100 cf	grains per one hundred cubic feet
gr/dscf	grains per dry standard cubic foot
GRI	Gas Research Institute
H ₂ S	hydrogen sulfide
HAP	hazardous air pollutant
hp	horsepower
IC	Internal Combustion
KW/hr	kilowatts per hour
lb/hr	pounds per hour
lb/MMBtu	pounds per million British thermal unit
MACT	Maximum Achievable Control Technology

MMcf/hr	million cubic feet per hour
MMscf	million standard cubic feet
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NG	natural gas
NGL	natural gas liquids
NMAAQs	New Mexico Ambient Air Quality Standards
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMSA	New Mexico Statues Annotated
NOx	nitrogen oxides
NSCR	non-selective Catalytic Reduction
NSPS	New Source Performance Standard
NSR	New Source Review
PEM	parametric emissions monitoring
PM	particulate matter (equivalent to TSP, total suspended particulate)
PM ₁₀	particulate matter 10 microns and less in diameter
PM _{2.5}	particulate matter 2.5 microns and less in diameter
pph	pounds per hour
ppmv	parts per million by volume
PSD	Prevention of Significant Deterioration
RATA	relative accuracy test assessment
RICE	reciprocating internal combustion engine
rpm	revolutions per minute
scfm	standard cubic feet per minute
SI	spark ignition
SO ₂	sulfur dioxide
SSM	Startup Shutdown Maintenance (see SSM definition)
TAP	Toxic Air Pollutant
TBD	to be determined
THC	total hydrocarbons
TSP	Total Suspended Particulates
tpy	tons per year
ULSD	ultra-low sulfur diesel
USEPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator Coordinate System
UTMH	Universal Transverse Mercator Horizontal
UTMV	Universal Transverse Mercator Vertical
VHAP	volatile hazardous air pollutant
VOC	volatile organic compounds