

AIR QUALITY BUREAU NEW SOURCE REVIEW PERMIT Issued under 20.2.72 NMAC

NSR Permit No: Facility Name:

Facility Owner/Operator: Mailing Address:

TEMPO/IDEA ID No: AIRS No:

Permitting Action: Source Classification:

Facility Location:

County:

Air Quality Bureau Contact Main AQB Phone No. 7200-M4 Revised Draft 8/18/2023 Road Runner Gas Processing Plant

Targa Northern Delaware, LLC P.O. Box 158 Artesia, NM 88211

36536-PRN20220003 350151662

Significant Permit Revision TV Major, PSD Minor

583,982 m E by 3,570,216 m N, Zone 13; Datum NAD83 Eddy

Joseph Kimbrell (505) 476-4300

Liz Bisbey-Kuehn Bureau Chief Air Quality Bureau Date

Template version: 06/28/2021

SCIENCE | INNOVATION | COLLABORATION | COMPLIANCE

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PART A FACILITY SPECIFIC REQUIREMENTS

A100 Introduction

A. This permit, NSR 7200-M4, supersedes all portions of Air Quality Permit 7200-M3 issued February 19, 2021, except portions requiring compliance tests. Compliance test conditions from previous permits, if not completed, are still in effect, in addition to compliance test requirements contained in this permit.

A101 <u>Permit Duration (expiration)</u>

A. The term of this permit is permanent unless withdrawn or cancelled by the Department.

A102 Facility: Description

- A. The function of the facility is to separate natural gas (methane) from heavier (liquid) hydrocarbons and raw sweet field gas so that the gas can meet pipeline specifications.
- B. This facility is located approximately 1.5 miles southwest of Loving, New Mexico in Eddy County.
- C. This modification consists of the following changes:
 - removed processing train 4 and associated equipment from the permit. Train 4 has not been constructed. Units 4-EP-1, 4-EP-2, 4-EP-4, 4-EP-5, 4-EP-7, FUG2, 4-D-1 to 4-D-4;
 - decreased site processing throughput from 321,200 MMscf/yr (880 MMscfd) to 268,275 MMscf/yr (735 MMscfd);
 - updated specifications and permit limits for proposed processing trains 2 and 3; increase permit limits to allow the ability to process gas containing up to 5 ppm H2S;
 - updated the permit representation for heaters to be equal to maximum heat output as opposed to design heat duty output;
 - add exempt methanol tanks; increase plant fugitives to use updated counts;
 - update tank emission calculations to account for maximum hourly emissions;

- update the number of electric compressors initially installed on existing train 1 and renumber the compressors in Form UA-2 Table 2-A for all electric compressors (Units D-1 thru D-7, 2-D-1 thru 2-D-8, 3-D-1 thru 3-D-8);
- update representations to separately list the amine sweetening unit for each train;

added applicability to State Regulation 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 total potential emission rates (PER) from this facility for information only. This is not an enforceable condition and excludes emissions from Minor NSR exempt activities per 20.2.72.202 NMAC.

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

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NOx)	155.9
Carbon Monoxide (CO)	231.4
Volatile Organic Compounds (VOC) ¹	297.3
Sulfur Dioxide (SO ₂)	147.9
Particulate Matter (PM)	16.8
Particulate Matter 10 microns or less (PM ₁₀)	15.7
Particulate Matter 2.5 microns or less (PM _{2.5})	15.4
Hydrogen Sulfide (H ₂ S)	0.54
Greenhouse Gas (GHG) as CO ₂ e	425,010

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

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

Pollutant	Emissions (tons per year)
Benzene	6.4
Hexane	7.0
Total HAPs ^{**}	24.2

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

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

A103 Facility: Applicable Regulations

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

Table 103.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
20.2.1 NMAC General Provisions	X	Entire Facility
20.2.7 NMAC Excess Emissions	X (Except for Sections 6(b); 110(b)(15); 111; 112; 113; 115; and 116 that are State Enforceable Only)	Entire Facility
20.2.50 NMAC Oil and Gas Sector - Ozone Precursor Pollutants	State Only	Reciprocating Compressor Seal Units D-1 thru D-7, 2-D- 1 thru 2-D-8, 3-D-1 thru 3-D- 8; EP-3A, EP-3B Amine Reboilers; EP-6, 2-EP-6 Stabilizer Reboilers; EP-2, 2- EP-2, 3-EP-2 Trim Reboilers; Control Devices EP-1, 2-EP- 1, 3-EP-1; Equipment Leaks & Fugitives-FUG; SSM emissions from pigging and component venting (MSSM)
20.2.61 NMAC Smoke and Visible Emissions	Х	EP-1, 2-EP-1, 3-EP-1, EP-2, 2-EP-2, 3-EP-2, 4-EP-2, EP- 3A, EP-3B, EP-4, 2-EP-4, 3- EP-4, EP-5, 2-EP-5, 3-EP-5, EP-6, 2-EP-6, EP-9, COMB-1
20.2.72 NMAC Construction Permit	Х	Entire Facility
20.2.73 NMAC Notice of Intent and Emissions Inventory Requirements	Х	Entire Facility
20.2.75 NMAC Construction Permit Fees	X	Entire Facility
20.2.77 NMAC New Source Performance	X	Units subject to 40 CFR 60
20.2.82 NMAC MACT Standards for Source Categories of HAPS	Х	Units subject to 40 CFR 63
40 CFR 60, Subpart A, General Provisions	X	Units subject to 40 CFR 60
40 CFR 60, Subpart Dc	X	EP-2, 2-EP-2, 3-EP-2, EP-3A, EP-3B, EP-6, 2-EP-6
40 CFR 60, Subpart Kb	X	T-1, T-2, T-3, T-4, T-5
40 CFR 60, Subpart OOOO	X	Potentially compressors 2-D-1 through 2-D-8 and fugitives associated with Train 2

Table 103.A:	Applicable	Requirements
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Applicable Requirements	Federally Enforceable	Unit No.
40 CFR 60, Subpart OOOOa	Х	Compressors D-1, D-2, D-3, D-4, 2-D-1, 2-D-2, 2-D-3, 2- D-4, 3-D-1, 3-D-2, 3-D-3, 3- D-4, Tanks T-1, T-2, T-3, T-4, T-5, Amines EP-8, 2-EP-8, 3- EP-8, and FUG
40 CFR 60, Subpart OOOOb	Not yet promulgated	Potentially applies to reciprocating electric compressors 3-D-1 through 3- D-8 and fugitives associated with Train 3 will be new affected facilities for the purpose of NSPS OOOOb.
40 CFR 63, Subpart A, General Provisions	Х	Units subject to 40 CFR 63
40 CFR 63, Subpart HH	X	ЕР-7, 2-ЕР-7, 3-ЕР-7
40 CFR 68 Chemical Accident Prevention	Х	Entire Facility

A104 Facility: Regulated Sources

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

Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity / Permitted Capacity
EP-1	SSM Flare (Pilot with Auto Ignition)	Zeeco Inc.	FL5100	31927	2017	2017	0.66 MMScf/day; 240.025 MMScf/yr
2-EP-1	SSM Flare (Pilot with Auto Ignition)	TBD	TBD	TBD	TBD	TBD	0.66 MMScf/day; 240.025 MMScf/yr
3-EP-1	SSM Flare (Pilot with Auto Ignition)	TBD	TBD	TBD	TBD	TBD	0.66 MMScf/day; 240.025 MMScf/yr
EP-2	Trim Reboiler	Fabsco Shell &Tube	E-207	516- 11764- 2/HI14- 149	2017	2017	26.5 MMBtu/hr
2-EP-2	Trim Reboiler	Fabsco Shell &Tube	E-207	TBD	TBD	TBD	26.5 MMBtu/hr

Table 104.A: Regulated Sources List

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Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity / Permitted Capacity
3-EP-2	Trim Reboiler	Fabsco Shell &Tube	E-207	TBD	TBD	TBD	26.5 MMBtu/hr
EP-3A	Amine Reboiler	Patrick	2BKU30/5 A-312	717- 5145A	2017	2017	70.28 MMBtu/hr
EP-3B	Amine Reboiler	Patrick	TBD	TBD	TBD	TBD	84.77 MMBtu/hr
EP-4	Glycol Reboiler Heater	Reset Energy	H-2801	F-9	2017	2017	3.9 MMBtu/hr
2-EP-4	Glycol Reboiler Heater	TBD	TBD	TBD	TBD	TBD	3.9 MMBtu/hr
3-EP-4	Glycol Reboiler Heater	TBD	TBD	TBD	TBD	TBD	3.9 MMBtu/hr
EP-5	Regen Reboiler Heater	Heatec	HCI5010- 40-G	HI16-201	2017	02/2017	9.5 MMBtu/hr
2-EP-5	Regen Reboiler Heater	TBD	TBD	TBD	TBD	TBD	9.5 MMBtu/hr
3-EP-5	Regen Reboiler Heater	TBD	TBD	TBD	TBD	TBD	9.5 MMBtu/hr
EP-6	Stabilizer Heater	Phoenix	PX-180	17169	2017	2017	23.4 MMBtu/hr
2-EP-6	Stabilizer Heater	TBD	TBD	TBD	TBD	TBD	23.4 MMBtu/hr
EP-7	Glycol Dehydrator Heater	Reset Energy	T-2707	153	2017	2017	240 MMScf/day
2-EP-7	Glycol Dehydrator Heater	TBD	TBD	TBD	TBD	TBD	240 MMScf/day
3-EP-7	Glycol Dehydrator Heater	TBD	TBD	TBD	TBD	TBD	240 MMScf/day
EP-8	Amine Still Vent	PBP Fabrication	V-5520	493	2017	2017	245 MMScf/day
2-EP-8	Amine Still Vent	TBD	TBD	TBD	TBD	TBD	245 MMScf/day
3-EP-8	Amine Still Vent	TBD	TBD	TBD	TBD	TBD	245 MMScf/day
EP-9	Thermal Oxidizer	Zeeco Inc.	TO-55	32339	2017	2017	71 MMBtu/hr
COMB-1	Combustor	Zeeco Inc	VCU- 7.5.40 Flare	31974-001	2017	2017	0.00156 MMScf/day; 12.75 MMscf/yr
LOAD	Loadout Emissions	NA	NA	NA	NA	NA	2,920,000 bbl/year
HAUL	Haul Road Emissions	NA	NA	NA	NA	NA	4,380 trips/yr
T-1	Condensate Tank	Tank &Vessel Boilers LP	NA	201723	2017	2017	1000 bbl
T-2	Condensate Tank	Tank &Vessel Boilers LP	NA	201724	2017	2017	1000 bbl

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Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity / Permitted Capacity
T-3	Condensate Tank	Tank &Vessel Boilers LP	NA	201720	2017	2017	1000 ьы
T-4	Condensate Tank	Tank &Vessel Boilers LP	NA	201721	2017	2017	1000 bbl
T-5	Condensate Tank	Tank &Vessel Boilers LP	NA	201722	2017	2017	1000 вы
T-6	Produced Water Tank	Palmer	NA	ST- 1711323	2017	08/2017	400 bbl
D-1	Electric Driven Residue Compressor	Ariel	KBZ/6	F54680	2017	9/1/2017	60 MMscf/d
D-2	Electric Driven Residue Compressor	Ariel	KBZ/6	F54701	2017	9/1/2017	60 MMscf/d
D-3	Electric Driven Residue Compressor	Ariel	KBZ/6	F54720	2017	9/1/2017	60 MMscf/d
D-4	Electric Driven Residue Compressor	Ariel	KBZ/6	F54750	2017	9/1/2017	60 MMscf/d
D-5	Electric Driven Refrigeration Compressor	GEA	XCR- XC26555- 18	XC0507	2017	TBD	4500 hp
D-6	Electric Driven Refrigeration Compressor	GEA	XCR- XC26555- 18	XC0508	2017	TBD	4500 hp
D-7	Electric Driven Refrigeration Compressor	GEA	XCR- XC26555- 18	XC0510	2017	TBD	4500 hp
2-D-1	Electric Driven Residue Compressor	Ariel	KBZ4	TBD	2012	TBD	TBD
2-D-2	Electric Driven Residue Compressor	Ariel	KBZ4	TBD	2012	TBD	TBD
2-D-3	Electric Driven Residue Compressor	Ariel	KBZ4	TBD	2012	TBD	TBD
2-D-4	Electric Driven Residue Compressor	Ariel	KBZ4	TBD	2012	TBD	TBD
2-D-5	Electric Driven Refrigeration Compressor	Frick	RWF546E	TBD	2012	TBD	TBD
2-D-6	Electric Driven Refrigeration Compressor	Frick	RWF546E	TBD	2012	TBD	TBD

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Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity / Permitted Capacity
2-D-7	Electric Driven Refrigeration Compressor	Frick	RWF546E	TBD	2012	TBD	TBD
2-D-8	Electric Driven Refrigeration Compressor	Frick	RWF546E	TBD	2012	TBD	TBD
3-D-1	Electric Driven Residue Compressor	Ariel	KBZ4	TBD	TBD	2023	60 MMscf/d
3-D-2	Electric Driven Residue Compressor	Ariel	KBZ4	TBD	TBD	2023	60 MMscf/d
3-D-3	Electric Driven Residue Compressor	Ariel	KBZ4	TBD	TBD	2023	60 MMscf/d
3-D-4	Electric Driven Residue Compressor	Ariel	KBZ4	TBD	TBD	2023	60 MMscf/d
3-D-5	Electric Driven Refrigeration Compressor	Frick	RWF546E	TBD	TBD	TBD	TBD
3-D-6	Electric Driven Refrigeration Compressor	Frick	RWF546E	TBD	TBD	TBD	TBD
3-D-7	Electric Driven Refrigeration Compressor	Frick	RWF546E	TBD	TBD	TBD	TBD
3-D-8	Electric Driven Refrigeration Compressor	Frick	RWF546E	TBD	TBD	TBD	TBD
FUG	Fugitive Emissions	NA	NA	NA	NA	NA	NA
SSM-TO	Thermal Oxidizer SSM	NA	NA	NA	NA	NA	NA
MSSM	Startup, Shutdown, Maintenance emissions from pigging and component venting	NA	NA	NA	NA	NA	NA
SSMB	Startup, Shutdown, Maintenance Blowdown Emissions	NA	NA	NA	NA	NA	NA
MSST	SSM from Degassing	NA	NA	NA	NA	NA	NA

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

A105 Facility: Control Equipment

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

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit Number(s) ¹
BTEX-1, BTEX-2, BTEX-3, EP-4, 2- EP-4, 3-EP-4	Each glycol dehydration unit is equipped with a flash tank. Flash tank off-gasses route to the fuel system (reboiler) or plant inlet (they are not vented). Each glycol dehydration unit is also equipped with a BTEX condenser which has a 98% control efficiency. The non- condensable stream is routed to the amine thermal oxidizer unit.	VOC, HAP, H2S	EP-7, 2-EP-7, 3- EP-7
EP-9	Thermal Oxidizer	VOC, HAP, H2S	EP-7, 2-EP-7, 3- EP-7, EP-8, 2-EP- 8, 3-EP-8 and BTEX-1, BTEX- 2, BTEX-3
COMB-1	Combustor, 95% control efficiency	VOC, HAP, H2S	T-1, T-2, T-3, T- 4, and T-5; SSMB
EP-1, 2-EP-1, 3-EP-1	Flares	VOC, HAP, H2S	Facility SSM Emissions, Trains 1, 2 & 3 inlet gas and residue gas

Table 105.A: Control Equipment List:

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

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A106 Facility: Allowable Emissions

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

Unit No.	NO _x ¹	NO _x ¹	СО	CO	VOC	VOC	SO ₂	SO ₂	PM10	PM10	PM2.5	PM2.5	H ₂ S	H ₂ S
0 1110 1 100	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy	pph	tpy
EP-1 (pilot/ purge)	0.22	0.96	0.44	1.91	-	-	0.009	0.041	-	-	-	-	<0.00	<0.00
2-EP-1 (pilot/ purge)	0.17	0.72	0.33	1.45	-	_	0.008	0.036	-	-	-	-	<0.00	<0.00
3-EP-1 (pilot/ purge)	0.03	0.14	0.065	0.28	-	-	0.002	0.007	-	-	-	-	<0.00 1	<0.00 1
EP-2	2.6	11.4	2.2	9.6	<	<	-	-	<	<	<	<	-	-
2-EP-2	<	3.7	2.2	9.6	<	<	-	-	<	<	<	<	-	-
3-EP-2	<	3.7	2.2	9.6	<	<	-	-	<	<	<	<	-	-
EP-3A	2.2	9.8	4.5	19.8	<	1.7	-	-	<	2.3	<	2.3	-	-
EP-3B	<	1.5	3.5	15.2	1.6	7.1	-	-	1.1	4.8	1.1	4.8	-	-
EP-4	<	1.7	<	1.4	<	<	-	-	<	<	<	<	-	-
2-EP-4	<	1.7	<	1.4	<	<	-	-	<	<	<	<	-	-
3-EP-4	<	1.7	<	1.4	<	<	-	-	<	<	<	<	-	-
EP-5	<	4.1	<	3.4	<	<	-	-	<	<	<	<	-	-
2-EP-5	<	4.1	<	3.4	<	<	-	-	<	<	<	<	-	-
3-EP-5	<	4.1	<	3.4	<	<	-	-	<	<	<	<	-	-
EP-6	2.3	10.1	1.9	8.4	<	<	-	-	<	<	<	<	-	-

Table 106.A: Allowable Emissions

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Unit No.	NO _x ¹ pph	NO _x ¹ tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO2 pph	SO ₂ tpy	PM10 pph	PM10 tpy	PM2.5 pph	PM2.5 tpy	H ₂ S pph	H ₂ S tpy
2-EP-6	2.3	10.1	1.9	8.4	<	<	-	-	<	<	<	<	-	-
EP-7 ⁴	-	-	-	-	*	0	-	-	-	-	-	-	-	-
2-EP-7 ⁴	-	-	-	-	*	0	-	-	-	-	-	-	-	-
3-EP-7 ⁴	-	-	-	-	*	0	-	-	-	-	-	-	-	-
EP-8 ⁴	-	-	-	-	*	0	-	-	-	-	-	-	-	-
2-EP-8 ⁴	-	-	-	-	*	0	-	-	-	-	-	-	-	-
3-EP-8 ⁴	-	-	-	-	*	0	-	-	-	-	-	-	-	-
EP-9	6.1	26.8	3.0	13.1	<	2.3	26.7	116.8	<	2.6	<	2.6	0.014	0.062
COMB-1	7.8	3.1	15.4	6.2	37.6	4.3	<	<	<	<	<	<	<	<
LOAD	-	-	-	-	*	54.4	-	-	-	-	-	-	-	-
T1-T5 ⁴⁵	-	-	-	-	*	0	-	-	-	-	-	-	-	-
T-6	-	-	-	-	*	<	-	-	-	-	-	-	<	<
FUG	-	-	-	-	*	115.5	-	-	-	-	-	-		

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

2 For Title V facilities, the Title V annual fee assessments are based on the sum of allowable tons per year emission limits in Sections A106 and A107. "-" indicates the application represented emissions of this pollutant are not expected.

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

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

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

4 Emissions represented at the thermal oxidizer (Unit EP-9)

5 Emissions represented at the combustor (Unit COMB-1)

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Table 106.B Emission Standards for Heaters (Units EP-3A, EP-3B Amine Reboilers; EP-6, 2-EP-6 Stabilizer Reboilers; EP-2, 2-EP-2, 3-EP-2 Trim Reboilers)

Date of Construction:	NO _X (ppmvd @ 3% O2)	CO (ppmvd @ 3% O2)
Constructed or reconstructed before the effective date of 20.2.50 NMAC	30	400
Constructed or reconstructed on or after the effective date of 20.2.50 NMAC	30	400

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

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

Unit No.	Description	NO _x (pph)	NO _x (tpy)	CO (pph)	CO (tpy)	VOC (pph)	VOC (tpy)	SO2 (pph)	SO2 (tpy)	H2S (pph)	H2S (tpy)
EP-1	SSM Flare for Train 1 - Emissions from blowdowns and pressure safety devices	1578.4	19.9	3151.0	39.7	2484.7	29.8	828.6	10.0	9.0	0.11
2-EP-1	SSM Flare for Train 2 - Emissions from blowdowns and pressure safety devices	1578.3	19.7	3150.9	39.3	2484.7	29.8	828.6	10.0	9.0	0.11
3-EP-1	SSM Flare for Train 3 - Emissions from blowdowns and pressure safety devices	1578.2	19.1	3151.0	38.1	2484.7	29.8	828.6	10.0	9.0	0.11
SSM-TO	Thermal Oxidizer Downtime SSM	-	-	-	-	326.2	3.3			14.2	0.14
MSSM	SSM emissions from pigging venting	-	-	-	-	*	4.1			0.01	<0.0 1
SSMB	SSM emissions from blowdowns	-	-	-	-	-	Note 4				
MSST	SSM emissions from tank degassing	-	-	_	-	38.16	0.034	-	-	-	-

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

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- 1. This authorization does not include VOC combustion emissions.
- 2. To report excess emissions for sources with no pound per hour and/or ton per year emission limits, see condition B110F.
- 3. "*" indicates hourly emission limits are not appropriate for this operating situation.
- 4. Emissions represented at the combustor (Unit COMB-1)

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

C. SSM Flaring Emissions (Units EP-1, 2-EP-1, and 3-EP-1

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

Emissions Due to Preventable Events

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

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

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

- (1) Hourly Emissions Calculations: The permittee shall calculate the pph NOx, CO, and VOC 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 NOx and CO emission rates; and
 - (d) VOC emission rates calculated using the destruction efficiency represented in the permit application and approved by the Department.
- (2) Annual Emissions Calculations: The permittee shall calculate the total tpy SSM emission rates as a daily rolling 12-month total, using the pph emission rates for each hour of the day as follows:
 - (a) During the first 12 months of this condition taking effect, the permittee shall record the daily total tons of NOx, CO, and VOC emissions.
 - (b) After the first 12 months of this condition taking affect, the permittee shall record the daily rolling 12-month total tpy NOx, CO, and VOC emissions.
- (3) SSM Events: The permittee shall retain monitoring records, including the date, time, and duration of each SSM event as defined in Table 107.A, as well as a description of the event including maintenance performed.

D. SSM-TO, MSSM, and MSST Venting Emissions

Requirement: The permittee shall comply with this condition to determine compliance with the allowable emission limits in Table 107.A. The allowable emission limits in Table 107.A were based upon the applicant's worst-case scenario and was calculated using the maximum volume of gas that can be vented from each event. The permittee shall calculate the emissions for the duration from each SSM event using the calculation provided below.

Definition of a TO SSM event is the duration of TO Downtime and based on the number of hours and fraction thereof.

Definition of a Pigging MSSM event is the entire volume of the pigging launcher/receiver.

Definition of a MSST Degassing event is the release of vapors from the complete volume of a condensate tank.

(1) Calculation Methodology for Determining Compliance

- (a) The permittee shall perform an extended gas analysis at the facility inlet at least once per year.
- (b) The permittee shall monitor and record each event and the cause of the event and shall record the specific information as required below.
- (c) The permittee shall calculate the emissions from each SSM event using the following calculations.
- (d) Each calendar month, the permittee shall calculate the total monthly emissions from all SSM/M events.
- (e) For each SSM/M event, the permittee shall calculate the emissions resulting from the event. The calculation shall be performed using the example calculations below:

SSM-TO Venting Emissions (VOC, H2S): [793,340 (scf/ hr)] x # of hours x [Stream Molecular Weight (lb/lb-mol)] x [weight % Pollutant] / ([397.5 scf/lb-mol] x [2,000 lb/ton]) = Pollutant emissions per event (ton/event)

MSSM Pigging Venting Emissions (VOC, H₂S): [3,850 (scf/event)] x [Stream Molecular Weight (lb/lb-mol)] x [weight % Pollutant] / ([397.5 scf/lb-mol] x [2,000 lb/ton]) = Pollutant emissions per event (ton/event)

MSST Tank Degassing Emissions (VOC, H₂S): [5808.8 (cf/event) x Maximum True Vapor Pressure (psia)] / [10.731 (psiscf/lb-mol*R) x (555 R)] x [Stream Molecular Weight (lb/lb-mol)] x [4.86 (Temp Expansion (%))] x [weight % Pollutant] = Pollutant emissions per event (ton/event)

(2) Emissions included in the Permit Limit and/or Reported as Excess Emissions

(a) All emissions due to routine or predictable SSM must be included and shall not exceed the emission limit in this permit. For emissions due to malfunctions, the permittee shall report these as excess emissions of the emission limit Table 107.A in accordance with 20.2.7 NMAC.

(3) Emissions Exceeding the Permit Limit

If the monthly rolling 12-month total of SSM exceeds the permitted emission limit, the permittee shall report the emissions as excess emissions in accordance with 20.2.7.110 NMAC.

(4) 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 be reported as excess emissions of the emission limit in Table 107.A in accordance with 20.2.7 NMAC.

(5) Emissions due to SSM other than those represented in Table 107.A shall be reported as excess emission events.

Monitoring:

- (1) The permittee shall perform an extended gas analysis at the facility inlet at least once per year.
- (2) The permittee shall monitor and record each SSM events and shall record the specific information as required in the condition below.
- (3) The permittee shall monitor and record the specific equipment causing the event and shall identify the cause of the event.
- (4) Each month, the permittee shall monitor and record the cumulative total VOC emissions resulting from SSM events during the first 12 months and, thereafter the monthly rolling 12-month total VOC emissions from all SSM events. Any malfunction emissions that have been reported in a final excess emissions report per 20.2.7.110.A(2) NMAC shall be excluded from this total.
- (5) The permittee shall monitor in accordance with Condition B108 of this permit.

Recordkeeping:

- (1) **Recording for Compliance Determination**
 - (a) For each SSM event, the permittee shall keep records of:
 - (i) the extended gas analysis documenting the %VOC,

(ii) the volumetric total gas vented in scf or MMscf,

(iii) the emission calculation, which shall be based on the calculation methodology required above.

- (b) For each SSM event, the permittee shall identify the equipment and shall identify the cause of the event that is the source of emissions.
- (c) The permittee shall record each SSM event and the total number of events each year for each.
- (d) Each month, the permittee shall record the cumulative total VOC emissions from SSM events during the first 12 months and, thereafter of the monthly rolling 12-month total VOC emissions from SSM events. The permittee shall record the calculations performed to determine the VOC emissions. Any malfunction emissions that have been reported in a final excess emissions report per 20.2.7.110.A(2) NMAC, shall be excluded from this total.

(2) Condition B109 Records

The permittee shall keep records in accordance with Condition B109 of this permit.

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

E. SSMB Emissions

Requirement:

- (1) At all times, all SSMB for blowdowns, starter vents and gas operated controller vapors shall be routed to the combustor unit COMB-1 and do not vent to the atmosphere.
- (2) The permittee shall perform a facility inlet gas analysis once every year based on a calendar year and track cumulative volumetric gas flows resulting from SSMB.
- (3) The permittee shall demonstrate compliance with the emission limits for SSMB and at Unit COMB-1 by multiplying the volumetric gas flow times the percent weight VOC in the gas analysis.

Monitoring:

- (1) Once each year, the permittee shall inspect to ensure the routing of all SSMB blowdown to the combustor unit COMB-1 and not vented to atmosphere.
- (2) The permittee shall monitor the facility inlet gas analysis once every year based on a calendar year, the percent VOC of the gas based on the most recent gas analysis, and of the cumulative volume of total gas vented in MMscf used to calculate the VOC emissions due to SSMB blowdown events. The cumulative totals shall be monitored during the first 12 months due to SSM events and, thereafter of the monthly rolling 12-month total VOC emissions.

Recordkeeping:

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

A108 Facility: Allowable Operations

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

Requirement: The flowrate of process gas entering the facility shall not exceed 735 MMscf/day. **Monitoring:** The Facility inlet flowrate shall be continuously monitored. The flowrate shall be determined using a monitoring instrument that directly measures natural gas flowrate into the facility with an accuracy of $\pm 2\%$ or better.

Recordkeeping: The Permittee shall record the daily flowrate of process gas (MMscfd) received at the Facility inlet. Records indicating the daily gas flow shall be maintained onsite for a minimum of five (5) years from the time of recording and made available to Department personnel upon request.

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

A109 Facility: Reporting Schedules

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

A110 Facility: Fuel and Fuel Sulfur Requirements

A. Fuel and Fuel Sulfur Requirements (EP-1, 2-EP-1, 3-EP-1, EP-2, 2-EP-2, 3-EP-2, EP-3A, EP-3B, EP-4, 2-EP-4, 3-EP-4, EP-5, 2-EP-5, 3-EP-5, EP-6, 2-EP-6)

Requirement: All combustion emission units shall combust only natural gas containing no more than 0.5 grains of total sulfur per 100 dry standard cubic feet.

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

Recordkeeping:

- (1) The permittee shall demonstrate compliance with the natural gas or fuel oil limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous or liquid fuel, or fuel gas analysis, specifying the allowable limit or less.
 - (2) If fuel gas analysis is used, the analysis shall not be older than one year.
 - (3) Alternatively, compliance shall be demonstrated by keeping a receipt or invoice from a commercial fuel supplier, with each fuel delivery, which shall include the delivery date, the fuel type delivered, the amount of fuel delivered, and the maximum sulfur content of the fuel.

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

A111 Facility: 20.2.61 NMAC Opacity

A. 20.2.61 NMAC Opacity Limit (EP-2, 2-EP-2, 3-EP-2, EP-3A, EP-3B, EP-4, 2-EP-4, 3-EP-4, EP-5, 2-EP-5, 3-EP-5, EP-6, 2-EP-6, EP-9, COMB-1)

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

Monitoring:

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

NMAC.

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

Recordkeeping:

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

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

EQUIPMENT SPECIFIC REQUIREMENTS

OIL AND GAS INDUSTRY

A200 Oil and Gas Industry

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

A201 <u>Engines</u> – Not Required

A202 Glycol Dehydrators

A. Extended Gas Analysis and Emission Calculations (Units EP-7, 2-EP-7, 3-EP-7)

Requirement: Compliance with the allowable VOC emission limits in Table 106.A shall be demonstrated by conducting an extended gas analysis on the dehydrator inlet gas annually and by calculating emissions using ProMax, GRI-GlyCalc, or another method if approved by the Department.

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

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

B. Glycol Pump Circulation Rate (Units EP-7, 2-EP-7, 3-EP-7)

Requirement: Compliance with the allowable VOC emission limit in Table 106.A shall be demonstrated by monitoring the glycol pump circulation rate for the unit. The circulation rate shall not exceed 1980 gallons per hour (33 gallons per minute).

Monitoring: The permittee shall monitor the circulation rate quarterly based on a calendar quarter (January 1st through March 31st, April 1 through June 30th, July 1st through September 30th, and October 1st through December 31st). Monitoring shall include a calibration or visual or audible inspection of pump rate setting.

Recordkeeping: The permittee shall maintain records that include a description of the monitoring and are in accordance with Section B109.

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

C. Control Device Inspection: Condenser, Flash Tank, and Thermal Oxidizer System (Units EP-7, 2-EP-7, 3-EP-7, EP-9, BTEX-1, BTEX-2, BTEX-3, EP-4, 2-EP-4, 3-EP-4)

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

(1) The still vent emissions shall be routed to the condenser.

(2) The condensers (BTEX-1, BTEX-2, BTEX-3) shall be a closed loop system, so the condensable stream from the condenser is sent to the atmospheric tanks.

(3) The flash tank off-gas and gaseous phase from the condenser shall be sent to the fuel system or the plant inlet. It shall not be released into the atmosphere.

(4) The non-condensable stream shall be routed to the thermal oxidizer (EP-9).

(5) The condenser and flash tank shall be operational at all times that the facility is in operation. The thermal oxidizer shall be operational at all times the facility is in operation except for times authorized for Downtime SSM events in Condition A107.C. The condenser, flash tank, and thermal oxidizer shall be installed, operated, and maintained according to manufacturer's specifications or permittee's written recommended policies and procedures. Thermal Oxidizer operating requirements are also established in Section A208 of this permit.

Monitoring: The permittee shall inspect the glycol dehydrators and the control equipment semiannually to ensure they are operating as initially designed.

Recordkeeping: The permittee shall record the inspection and the results of all equipment and control device inspections chronologically, noting any maintenance or repairs needed to bring the dehydrator into compliance. The permittee shall maintain a copy of the manufacturer's or permittee's written maintenance recommendations and provided them upon request by the Department.

D. 40 CFR 63, Subpart HH (Units EP-7, 2-EP-7, 3-EP-7)

Requirement: The units are subject to 40 CFR 63, Subpart HH and the permittee shall comply with all applicable requirements, including the general standards of 40 CFR 63.764.

Monitoring: The permittee shall comply with the monitoring requirements of 40 CFR 63.773.

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 40 CFR 63.774.

Reporting: The permittee shall comply with the applicable reporting requirements of 40 CFR 63.775 and in Section B110.

A203 Tanks, Loading, and Tank Control

A. Tank Throughput (Units T-1, T-2, T-3, T-4, T-5, and T-6)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by limiting the monthly rolling 12-month total combined condensate throughput to Units T-1, T-2, T-3, T-4, T-5 to 122,640,000 gallons per year (2,920,000 barrels per year) and the monthly rolling 12-month total produced water throughput to Unit T-6 to 1,030,097 gallons per year (24,526 barrels per year).

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

Recordkeeping: The permittee shall record the monthly total throughput of liquids. Each month, during the first 12 months of monitoring, the permittee shall record the cumulative total liquid throughput and after the first 12 months of monitoring, the permittee shall calculate and record the monthly rolling 12-month total liquid throughput.

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

Records shall also be maintained in accordance with Section B109.

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

B. Truck Loading - Condensate 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 2,920,000 barrels per year.

Monitoring: The permittee shall monitor the condensate 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.

C. Combustor Flame and Visible Emissions (20.2.61 NMAC) (Unit COMB-1)

Requirement: Compliance with the allowable emission limits in Section A106 shall be demonstrated by the combustor being equipped with a system to ensure that it is operated with a flame present at all times and operated with no visible emissions.

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

Monitoring:

(1) Pilot Flame:

The permittee shall continuously monitor the presence of a 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. 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.

Recordkeeping:

(1) Pilot Flame:

The permittee shall record all instances of alarm activation, including the date and cause of alarm activation, actions taken to bring the unit 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.

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

D. Combustor Operations (Units COMB-1, T-1, T-2, T-3, T-4, T-5)

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

- 1) The permittee shall install, operate, and maintain the COMB-1 according to the manufacturer's specifications or permittee's written recommended policies and procedures.
- The permittee shall ensure that all emissions from the condensate storage tanks (Units T-1, T-2, T-3, T-4, and T-5) are at all times routed to the COMB-1. The permittee shall ensure that the tanks emissions do not vent to the atmosphere.
- 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 minimizes emissions to the atmosphere.

Monitoring: The permittee shall monitor the following:

- 1) The date, start time, and end time of any downtime and/or maintenance of the COMB-1.
- 2) Monthly, inspect storage tanks (Units T-1, T-2, T-3, T-4 and T-5) for proper routing to the COMB-1 and inspect storage tanks (Units T-1, T-2, T-3, T-4 and T-5) and the COMB-1 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 storage tanks (Units T-1, T-2, T-3, T-4 and T-5) and/or the COMB-1 into compliance with permit conditions.
- 2) The permittee shall record the date, start time, and end time of any downtime and/or maintenance of the COMB-1.
- 3) The permittee shall maintain a copy of the manufacturer's or permittee's written maintenance recommendations and provided them upon request by the Department.

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

E. Tank Control Requirements - Condensate Stabilization System (T-1, T-2, T-3, T-4, T-5)

Requirement: To demonstrate compliance with the allowable VOC emission limits for Units T-1, T-2, T-3, T-4, and T-5 in Table 106.A, the permittee shall ensure that the emissions from the refrigeration system condensate, the slug catcher liquids, and the condensate stabilizer are re-routed back into the facility process stream.

Monitoring: The permittee shall perform a semi-annual maintenance evaluation of the stabilization system to ensure it is operating properly.

Recordkeeping: The permittee shall record the results of all equipment and control device inspections chronologically, noting any maintenance or repairs needed to bring the stabilization system into compliance.

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

A204 Heaters and Boilers

A. 40 CFR 60, Subpart Dc (Units EP-2, 2-EP-2, 3-EP-2, EP-3A, EP-3B, EP-6, 2-EP-6) **Requirement:** The units are subject to 40 CFR 60, Subpart Dc and the permittee shall comply

with the applicable requirements of 40 CFR 60, Subpart A and Subpart Dc.

Monitoring: The permittee shall comply with all applicable monitoring and testing requirements of 40 CFR 60, Subpart Dc.

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 40 CFR 60.48c.

Reporting: The permittee shall comply with the reporting requirements of 40 CFR 60.48c.

B. Operational Inspection (Units EP-2, 2-EP-2, 3-EP-2, EP-3A, EP-3B, EP-4, 2-EP-4, 3-EP-4, EP-5, 2-EP-5, 3-EP-5, EP-6, 2-EP-6)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by performing periodic inspections to ensure proper operations.

Monitoring: The permittee shall conduct monthly operational inspections to determine that the heaters are operating properly. The operational inspections shall include operational checks for indications of insufficient excess air, or too much excess combustion air. These operational checks shall include observation of common physical indications of improper combustion, including indications specified by the heater manufacturer, and indications based on operational experience with the units.

Recordkeeping: The permittee shall maintain records of operating inspections, describing the results and noting chronologically any adjustments needed to bring a boiler into compliance. Records shall be maintained in accordance with Condition B109.

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

C. 20.2.50 NMAC Natural Gas Fired Heaters (Units EP-3A, EP-3B Amine Reboilers; EP-6, 2-EP-6 Stabilizer Reboilers; EP-2, 2-EP-2, 3_EP-2 Trim Reboilers) [New and existing natural gas fired heaters greater than 20 MMBTU/hr including heater treaters, heated flash separators, evaporator units, fractionation column heaters, and glycol dehydrator reboilers in use at well sites, tank batteries, gathering and boosting stations, natural gas processing plants, and transmission compressor stations. [*This includes heaters used as amine reboilers, even though the amine unit portion is not regulated under Part 50*]]

Requirement: The units, which are natural gas fired heaters greater than 20 MMBTU/hr, 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 20.2.50.119.B. The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.119.B.

Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.119.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 20.2.50.119.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 20.2.50.119.E, and in accordance with section B110 of this permit.

A205 <u>Turbines</u> – Not Required

A206 Flares

A. Flare Flame and Visible Emissions (20.2.61 NMAC) (Units EP-1, 2-EP-1, 3-EP-1)

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

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

Monitoring:

(1) Flare Pilot Flame:

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

(2) Visible Emissions:

At least once per year during an SSM 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 SSM events that occur for less than 30 minutes, visible emissions shall not occur for more the 15% during the duration of the event.

Recordkeeping:

(1) Flare Pilot Flame:

The permittee shall record all instances of alarm activation, including the date and time 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, 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 SSM event.

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

B. Flare Gas Flow Monitoring and Gas Analysis (Units EP-1, 2-EP-1, 3-EP-1)

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 A107.C. All flow meters and inline chemical composition analyzers shall be installed, calibrated, operated and maintained in accordance with the requirements of Condition B108.H.

Monitoring:

(1) Gas Flow:

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

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

(2) Gas Analysis:

- (a) Once per calendar year, the permittee shall perform a gas analysis, including measurement of the H₂S content, 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. The permittee shall maintain a copy of the manufacturer's specification's, engineering estimates, or permittee's written policies and procedures.

C. Flare Operation Requirement (Units EP-1, 2-EP-1, 3-EP-1)

Requirement:

- 1) The igniter shall be operational at all times gas is sent to the flare.
- 2) The flare shall combust gas at all times gas is sent to the flare.
- 3) The flare shall be installed, operated, and maintained according to manufacturer's specifications or permittee's written policies and procedures.

Monitoring:

The permittee shall:

1) Monthly, inspect the flare to ensure it is operating in accordance with the manufacturer's specifications or permittee's written policies and procedures.

2) The permittee shall monitor the auto-ignition system each time gas is sent to the flare. **Recordkeeping:** The permittee shall record:

- 1) Chronologically, the name of the person conducting the inspection, the results of all equipment inspections, and any maintenance or repairs needed for the flare to be compliant.
- 2) Maintain a copy of the manufacturer's or permittee's maintenance recommendations.
- 3) The date, time, and personnel performing the monitoring of the auto-ignition system, and the results of inspecting the auto-ignition system.

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

D. Flare Construction and Stack Height (Units 2-EP-1, 3-EP-1)

Requirement: Compliance with the established emission limits, modeling and operations represented in the application shall be demonstrated by constructing the flares to the parameters used in the Air Dispersion Modeling. The flare height shall be a minimum of 199 feet above ground for Units 2-EP-1; 100 feet above ground height for EP-1; and 150 above ground height for 3-EP-1. The controlled units shall be connected by hard piping to the flares. The flares must be constructed as described in the permit application and all subsequent materials submitted by the applicant.

Monitoring: The permittee shall construct the flares as required and maintain a copy of the stamped engineering specification sheet and as-built drawing.

Recordkeeping: Records shall be kept of the post-construction inspections, engineering stamped specification sheets, and as-built drawing.

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

E. Open Flares used to comply with 20.2.50 NMAC (Units EP-1, 2-EP-1, 3-EP-1)

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.C(1). The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.115.C(1).

Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.115.C (2), and in accordance with section B108 of this permit.

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.115.C(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.C(4), of 20.2.50.115.G, and in accordance with section B110 of this permit.

A207 <u>Sulfur Recovery Units</u> – Not Required

A208 Amine Unit and Thermal Oxidizer

A. Amine Unit Control and Thermal Oxidizer Operating Requirements (Unit EP-9 Controlling EP-8, 2-EP-8, 3-EP-8)

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

1) The permittee shall ensure that all off-gases from the amine still vent (Units EP-8, 2-EP-8, 3-EP-8) is at all times routed to the thermal oxidizer (Unit EP-9). Excluding approved downtime periods, the thermal oxidizer shall be operational at all times emissions are sent to it.

2) The thermal oxidizer shall be installed, operated, and maintained according to manufacturer's specifications.

3) The amine unit flash tank off-gases shall not be released directly to the atmosphere and shall at all times be re-routed to an inlet or other process stream within the facility.

Monitoring:

1) The permittee shall inspect the amine unit and control equipment semi-annually to ensure it is controlled as required and operating in accordance with the manufacturer's or permittee's recommended operating and maintenance procedures.

Recordkeeping:

1) The permittee shall record the results of all equipment and control device inspections chronologically, noting any maintenance or repairs needed to bring the units into compliance.

2) The permittee shall maintain a copy of the manufacturer's or permittee's maintenance recommendations.

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

B. Thermal Oxidizer Visible Emissions (20.2.61 NMAC) (Unit EP-9)

Requirement: The unit is subject to the 20% opacity standards in 20.2.61 NMAC and complying with the no visible emissions requirements demonstrates compliance with 20.2.61 NMAC opacity limit.

Monitoring:

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. 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.

Recordkeeping:

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.

C. Thermal Oxidizer Operation and Emissions Calculation (Unit EP-9)

Requirement: Compliance with the allowable emission limits in Tables 106.A shall be demonstrated by completing the monitoring, recordkeeping, and reporting specified below.

Monitoring:

- (1) <u>Flow Monitoring</u>: Gas flowmeters and flow totalizers, equipped with a chart recorder or data logger (electronic storage), shall be installed to monitor gas flow and record the total standard cubic feet (scf) of gas sent to the Thermal Oxidizer including:
 - a. Pilot, purge, and assist gas
 - i. Manufacturer's specifications may be used to determine pilot, purge, and assist gas flow rates.
 - b. Process gas
 - i. Manufacturer's specifications or calculated estimates using Promax, E&P Tanks, or another approved method, may be used to determine process gas flow rates for the unit if a flow meter is deemed impractical due to low or inconsistent flow to the unit.
- (2) <u>Calibration</u>: The flow meter(s), totalizer(s), and if used, the inline monitor shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.
- (3) <u>Hourly Flow Rate</u>: Gas flow rates shall be logged during, or calculated for, each hour and each month that the thermal oxidizer is in operation.
- (4) <u>Gas Analysis</u>: The permittee shall measure the VOC content, and the heating value (Btu/scf) of the gas sent to the thermal oxidizer for combustion. The VOC content, and heating value (Btu/scf) of the natural gas sent to the thermal oxidizer shall be measured at least once annually with an extended gas analysis.

Recordkeeping: The following records shall be kept:

- (1) <u>Flow Monitoring</u> & (2) <u>Calibration</u>: Records of flowmeter, totalizer, and inline monitor certifications, calibrations, breakdowns, reasons for the breakdown, and corrective actions. If manufacturer's specifications are used to determine pilot and purge fuel gas flow, the manufacturer's specification documentation must be maintained.
- (3) <u>Hourly Flow Rate</u>: Records of the calculated average hourly flowmeter and flow totalizer measurements of process and assist gas sent to the thermal oxidizer in scf/hr.
- (4) <u>Gas Analysis</u>: Gas analysis results as received from the laboratory including the VOC content and the heating value (Btu/scf) and analysis method utilized.

The permittee shall maintain all records in accordance with Section B109.

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

D. Thermal Oxidizer Control Efficiency (Unit EP-9)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by maintaining a flame anytime gas is routed to the oxidizer, maintaining a combustion temperature that achieves a destruction efficiency at or above 98% for VOCs, and monitoring unit downtime or malfunction.

Monitoring: The permittee shall determine a combustion temperature that achieves the required destruction efficiency from periodic emissions testing performed in accordance with A208.E, monitor the combustion temperature of the thermal oxidizer continuously, and record the average temperature each 24-hour period. Compliance with this condition is defined as operating with temperatures within \pm 5% of the combustion temperature during the emissions test.

Recordkeeping: The permittee shall maintain records including the date of each 24-hour average temperature, detail any deficiencies in operation identified, and record any corrective actions taken to restore the control device to operation.

Records shall also be maintained in accordance with Section B109.

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

E. Thermal Oxidizer Periodic Emissions Testing (Unit EP-9)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by completing periodic emission tests and calculating the destruction efficiency of the thermal oxidizer (TO) during the monitoring period.

Monitoring: The permittee shall test using EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. Emission testing is required for un-speciated VOCs <u>pre-control</u> and <u>post-TO</u> (stack). Periodic emissions testing shall be carried out as described below.

Test results for pre-control and post-control VOCs shall be used to calculate the destruction efficiency of the TO at the operator-defined operating conditions. Compliant destruction efficiency is defined as a percentage equal to or greater than 99.9%.

(1) The testing shall be conducted annually:

- a. Testing frequency shall be once per year.
- b. The monitoring period is defined as a calendar year.

(2) 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.

(3) The permittee shall follow the General Testing Procedures of Section B111.

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.

F. Enclosed Combustion Devices (ECD) and Thermal Oxidizers (TO) used to comply with 20.2.50 NMAC (Unit EP-9)

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). The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.115.D(1).

Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.115.D(2), and in accordance with section B108 of this permit.

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.115.D(3), of 20.2.50.115.F, and in accordance with section B109 of this permit.

Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.115.D(4), of 20.2.50.115.G, and in accordance with section B110 of this permit.

A209 Fugitives

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

Requirement: The collection of fugitive emissions components (as defined in 40 CFR §60.5430a) at this facility are subject to the fugitive emissions GHG and VOC leak standards at 40 CFR §60.5397a of 40 CFR 60, Subpart OOOOa. The permittee shall comply with all applicable requirements in Subparts A and OOOOa.

Monitoring: The permittee shall implement a leak detection and repair program and shall comply with the standards as specified at 40 CFR §60.5397a. Alternative means of emissions limitations at §60.5398a can only be approved by the US EPA.

Recordkeeping: The permittee shall comply with the applicable recordkeeping requirements specified at 40 CFR §60.5420a(c), including §60.5420a(c)(15)

Reporting: The permittee shall comply with the applicable reporting requirements specified at 40 CFR §60.5420a(b), including §60.5420a(b)(7).

B. 40 CFR 60, Subpart OOOOa - Reciprocating Compressors (Units D-1 thru D-4, 2-D-1 thru 2-D-4, 3-D-1 thru 3-D-4)

Requirement: The reciprocating compressors at this facility are subject to 40 CFR 60, Subparts A and OOOOa and the permittee shall comply with the notification requirements in Subpart A and the specific requirements of Subpart OOOOa, including standards in §60.5385a.

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

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

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. 40 CFR 60, Subpart OOOOa – Tanks (Units T-1, T-2, T-3, T-4, T-5)

Requirement: The permittee shall comply with 40 CFR 60, Subparts A and OOOOa if any units are constructed, modified, or reconstructed after the applicability date in 40 CFR 60.5365a. The permittee shall comply with the requirements in Subpart A and the specific requirements of 40 CFR 60.5365a(e)(3).

Monitoring: The permittee shall comply with all applicable monitoring and testing requirements in 40 CFR 60, Subpart A and Subpart OOOOa.

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart OOOOa.

Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart OOOOa and in Section B110.

D. 40 CFR 60, Subpart OOOOa – Amine Unit (Units EP-8, 2-EP-8, 3-EP-8)

Requirement: The unit is subject to 40 CFR 60, Subparts A and OOOOa if the source is constructed, modified, or reconstructed after the applicability date in 40 CFR 60.5365a. The permittee shall comply with the applicable requirements in Subpart A and the specific requirements of Subpart OOOOa.

Per 60.5365a(g)(3) this unit is required to comply with 60.5423a(c) but is not required to comply with 60.5405a through 60.5407a, 60.5410a(g), or 60.5415a(g).

Monitoring: The permittee shall comply with all applicable monitoring and testing requirements in 40 CFR 60, Subpart A and Subpart OOOOa.

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to 60.5423a(c).

Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to 60.5423a(c), and in Section B110.

E. 20.2.50 NMAC Equipment Leaks and Fugitive Emissions (Unit FUG) applies at all well sites, tank batteries, gathering and boosting stations, natural gas processing plants, transmission compressor stations, and associated piping and components. Does not include components in air or water service.

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, 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, and in accordance with section B108 of this permit.

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.116.F, and in accordance with section B109 of this permit.

Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.116.G, and in accordance with section B110 of this permit.

F. 20.2.50 NMAC Pig Launchers and Receivers (Unit MSSM-Pigging and Component Venting)

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 20.2.50.121.B. The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.121.B.

Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.121.C, and in accordance with section B108 of this permit.

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.121.D, and in accordance with section B109 of this permit.

Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.121.E, and in accordance with section B110 of this permit.

G. 20.2.50 NMAC Electric Compressors Seals (Reciprocating Compressors Units D-1 thru D-7, 2-D-1 thru 2-D-8, 3-D-1 thru 3-D-8)

Requirement: The unit are subject to 20.2.50 NMAC and the permittee shall comply with all applicable requirements, including the general provisions of 20.2.50.112 and the emission standards in 20.2.50.114.B. The units shall comply with these emission standards in accordance with the dates specified in 20.2.50.114.B.

Monitoring: The permittee shall comply with the monitoring requirements of 20.2.50.112.B, of 20.2.50.114.C, and in accordance with section B108 of this permit.

Recordkeeping: The permittee shall comply with the recordkeeping requirements of 20.2.50.112.C, of 20.2.50.114.D, and in accordance with section B109 of this permit.

Reporting: The permittee shall comply with the applicable reporting requirements of 20.2.50.112.D, of 20.2.50.114.E, and in accordance with section B110 of this permit.

PART B GENERAL CONDITIONS (Attached)

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