Air Quality Bureau
TITLE V OPERATING PERMIT
Issued under 20.2.70 NMAC

Certified Mail No:
Return Receipt Requested

Operating Permit No:	P289-M2
Facility Name:	Big Lizard Compressor Station
Facility Owner/Operator:	Targa Northern Delaware, LLC
Permittee Name:	Targa Northern Delaware, LLC
Mailing Address:	811 Louisiana, Suite 2100 Houston, TX 77002
TEMPO/IDEA ID No:	29590 - PRT20230001
AIRS No:	350251490
Permitting Action:	Permit Reopening
Source Classification:	Major-TV
Facility Location:	UTM E 629930 m, UTM N 3575370 m, Zone 13, Datum: WGS84
County:	Lea
Air Quality Bureau Contact	Urshula Bajracharya
Main AQB Phone No.	(505) 476-4300
TV Permit Expiration Date:	7/28/2027
TV Renewal Application Due:	7/28/2026

Liz Bisbey-Kuehn
Bureau Chief
Air Quality Bureau

Date

Template version: 06/28/2021

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PART A FACILITY SPECIFIC REQUIREMENTS

A100 Introduction

A. Not Applicable

A101 Permit Duration (expiration)

A. This permit, P289M2, supersedes permit P289 and will expire on July 29, 2027. 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 as a compressor station gathering low pressure field gas. The gas is compressed by natural gas engine driven compressors. Once the gas is compressed, it is treated by an amine system for carbon dioxide removal. After amine treatment, it is treated using a glycol dehydration system to remove entrained water. The dehydrated gas is discharged from the station via pipeline to gas processing plants.

B. The facility is 28.0 miles Northwest of Jal, NM. (20.2.70.302.A(7) NMAC)

C. Pursuant to 20.2.70.405.A(4) NMAC, the New Mexico Environment Department (NMED) reopened the initial TV Operating Permit P289 for Big Lizard Compressor Station issued July 29, 2022, as the result of an EPA Order regarding Petition Number VI-2022-11.

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 Dioxide	101.7
Carbon Monoxide	116.8
Volatile Organic Compounds (VOC)	216.8
Sulfur Dioxide	11.7
Particulate Matter (10 microns or less)	11.0
Particulate Matter (2.5 microns or less)	11.0
Hydrogen sulfide (NMAAQ)	4.2
Greenhouse Gas (GHG) as CO_2e	162,080

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

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; (Ethyl aldehyde)	5.2
Acrolein	3.1
Benzene	1.9
Formaldehyde	8.7
Toluene; (Methyl benzene)	1.8
Total HAPs**	22.2

* 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 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: 7960-M2 (Per 20.2.72 NMAC)	X	Entire Facility
20.2.1 NMAC General Provisions	X	Entire Facility
20.2.7 NMAC Excess Emissions		Entire Facility
20.2.61 NMAC Smoke and Visible Emissions	X	Compressor Engine: 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240, ENG-9, ENG-10, Reboilers: RBL-1, RBL-2, RBL-3, AU-RB1, AU-RB2 FL-1
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
20.2.77 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 60, Subpart A, General Provisions	X	FUG-1 Compressor Engines: 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240, ENG-9, ENG-10 AU-Rb1 and AU-Rb2
40 CFR 60, Subpart Dc	X	AU-Rb1 and AU-Rb2
40 CFR 60, Subpart JJJJ	X	Compressor Engines: 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240, ENG-9, ENG-10

Table 103.A: Applicable Requirements

Applicable Requirements	Federally Enforceable	Unit No.
40 CFR 60, Subpart OOOOa	X	FUG-1 Compressors associated with Engines: 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240, ENG-9, ENG-10
40 CFR 63, Subpart HH	X	Dehy-1, Dehy-2, Dehy-3
40 CFR 63, Subpart ZZZZ	X	Compressor Engines: 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240, ENG-9, ENG-10
40 CFR 64 Compliance Assurance Monitoring	X	Dehy-1, Dehy-2, Dehy-3, and AU-1

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
20.2.3 NMAC Ambient Air Quality Standards	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.

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
3347	Compressor Engine 1	Caterpillar	G3516J	N6W00776	8/1/2018	8/1/2018	1,380HP
3346	Compressor Engine 2	Caterpillar	G3516J	N6W00723	8/1/2018	8/1/2018	1,380HP
3171	Compressor Engine 3	Caterpillar	G3606A4	JFE01052	6/7/2018	6/7/2018	1,875HP
3155	Compressor Engine 4	Caterpillar	G3606A4	JFE01056	6/12/2018	6/12/2018	1,875HP
3338	Compressor Engine 5	Caterpillar	G3608	XH700858	1/29/2018	1/29/2018	2,500HP
3339	Compressor Engine 6	Caterpillar	G3608	XH700861	6/12/2018	6/12/2018	2,500HP
3319	Compressor Engine 7	Caterpillar	G3606A4	JFE01514	1/29/2018	1/29/2018	1,875HP
3240	Compressor Engine 8	Caterpillar	G3606A4	JFE01175	2/1/2018	2/1/2018	1,875HP
ENG-9	Compressor Engine 9	Caterpillar	G3606A4	TBD	TBD	TBD	1,875HP
ENG-10	Compressor Engine 10	Caterpillar	G3606A4	TBD	TBD	TBD	1,875HP
Dehy-1	TEG Dehydrator 1	TBD	TBD	TBD	TBD	TBD	30 MMscf/day
RBL-1	Dehydrator Reboiler 1	TBD	TBD	TBD	TBD	TBD	0.75 MMBtu/hr
Dehy-2	TEG Dehydrator 2	TBD	TBD	TBD	TBD	TBD	30 MMscf/day

Table 104.A: Regulated Sources List

Unit No.	Source Description	Make	Model	Serial No.	Construction/ Reconstruction Date	Manufacture Date	Manufacturer Rated Capacity /Permitted Capacity
RBL-2	Dehydrator Reboiler 2	TBD	TBD	TBD	TBD	TBD	0.75 MMBtu/hr
Dehy-3	TEG Dehydrator 3	TBD	TBD	TBD	TBD	TBD	20 MMscf/day
RBL-3	Dehydrator Reboiler 3	TBD	TBD	TBD	TBD	TBD	0.75 MMBtu/hr
TK-1	Atmospheric Tank 1	TBD	TBD	5661	TBD	TBD	400 bbl
TK-2	Atmospheric Tank 2	TBD	TBD	5646	TBD	TBD	400 bbl
TK-3	Atmospheric Tank 3	TBD	TBD	TBD	TBD	TBD	400 bbl
TK-4	Atmospheric Tank 4	TBD	TBD	TBD	TBD	TBD	400 bbl
LOAD-1	Truck Loading	N/A	N/A	N/A	N/A	N/A	N/A
FUG-1	Fugitives	N/A	N/A	N/A	N/A	N/A	N/A
AU-1	Amine Unit	TBD	TBD	TBD	TBD	TBD	80 MMscf/day
AU-Rb 1	15.0 MMBtu/hr Amine Reboiler	Bryan Steam, LLC	RW 1500	TBD	TBD	TBD	15.0 MMBtu/hr
AU-Rb 2	15.0 MMBtu/hr Amine Reboiler	Bryan Steam, LLC	RW 1500	TBD	TBD	TBD	15.0 MMBtu/hr
FL-1	Control Flare	TBD	TBD	TBD	TBD	TBD	6.11MMscf/day
SSM/M Compressor Blowdown Venting	Startup, Shutdown, and Maintenance/Malfunction Compressor Blowdown Venting	N/A	N/A	N/A	N/A	N/A	N/A

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

A105 Facility: Control Equipment

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

Table 105.A: Control Equipment List:

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit No.[1]
Catalyst-1	Catalyst	CO, VOC	3347
Catalyst-2	Catalyst	CO, VOC	3346
Catalyst-3	Catalyst	CO, VOC	3171
Catalyst-4	Catalyst	CO, VOC	3155
Catalyst-5	Catalyst	CO, VOC	3338
Catalyst-6	Catalyst	CO, VOC	3339
Catalyst-7	Catalyst	CO, VOC	3319
Catalyst-8	Catalyst	CO, VOC	3240
Catalyst-9	Catalyst	CO, VOC	ENG-9
Catalyst-10	Catalyst	CO, VOC	ENG-10
BTEX-1, RBL-1	Condenser, non-condensable to fuel systems, condensable to tanks	HAP, VOC	Dehy-1
BTEX-2, RBL-2	Condenser, non-condensable to fuel systems, condensable to tanks	HAP, VOC	Dehy-2
BTEX-3, RBL-3	Condenser, non-condensable to fuel systems, condensable to tanks	HAP, VOC	Dehy-3

Table 105.A: Control Equipment List:

Control Equipment Unit No.	Control Description	Pollutant being controlled	Control for Unit No.[1]
FL-1, AU-Rb1 and AU-Rb2	Flare and amine reboilers	HAP, VOC, H2S	AU-1

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

A106 Facility: Allowable Emissions

A. The following Section lists the emission units, and their allowable emission limits. (40 CFR 50; 40 CFR 60, Subparts A, Dc, JJJJ and OOOOa; 40 CFR 63, Subparts A, HH and ZZZZ; 40 CFR 64; Paragraphs 1, 7, and 8 of 20.2.70.302.A NMAC; and NSR Permit 7960-M2).

Table 106.A: Allowable Emissions[2,4]

Unit No.	[1]NO_x pph	NO_x 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	H_2S (pph)	H_2S (tpy)
3347	1.5	6.7	0.6	2.8	3.4	14.7	<	<	<	<	<	<	<	<
3346	1.5	6.7	0.6	2.8	3.4	14.7	<	<	<	<	<	<	<	<
3171	2.1	9.1	0.7	3.2	3.9	17.2	<	<	<	<	<	<	<	<
3155	2.1	9.1	0.7	3.2	3.9	17.2	<	<	<	<	<	<	<	<
3338	2.8	6.1	1.2	5.2	4.9	21.6	<	<	<	<	<	<	<	<
3339	2.8	6.1	1.2	5.2	4.9	21.6	<	<	<	<	<	<	<	<
3319	2.1	9.1	0.7	3.2	3.9	17.2	<	<	<	<	<	<	<	<
3240	2.1	9.1	0.7	3.2	3.9	17.2	<	<	<	<	<	<	<	<
ENG-9	2.1	9.1	0.7	3.2	3.9	17.2	<	<	<	<	<	<	<	<
ENG-10	2.1	9.1	0.7	3.2	3.9	17.2	<	<	<	<	<	<	<	<
Dehy-1	-	-	-	-	0.7	3.0	-	-	-	-	-	-	<	<
Rbl-1	0.1	0.3	0.1	0.3	0.004	0.02	0.01	0.04	0.01	0.02	0.01	0.02	0.02	0.09
Dehy-2	-	-	-	-	0.7	3.0	-	-	-	-	-	-	<	<
Rbl-2	0.1	0.3	0.1	0.3	0.004	0.02	0.01	0.04	0.01	0.02	0.01	0.02	0.02	0.09
Dehy-3	-	-	-	-	0.7	3.2	-	-	-	-	-	-	<	<
Rbl-3	0.1	0.3	0.1	0.3	0.004	0.02	0.01	0.04	0.01	0.02	0.01	0.02	0.02	0.09
Tk-1	-	-	-	-	*	<	-	-	-	-	-	-	-	-
Tk-2	-	-	-	-	*	<	-	-	-	-	-	-	-	-
Tk-3	-	-	-	-	*	<	-	-	-	-	-	-	-	-
Tk-4	-	-	-	-	*	<	-	-	-	-	-	-	-	-
Load-1	-	-	-	-	*	5.5	-	-	-	-	-	-	-	-
Fug-1	-	-	-	-	*	7.2	-	-	-	-	-	-	<	<

Table 106.A: Allowable Emissions[2,4]

Unit No.	[1]NO_x pph	NO_x 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	H_2S (pph)	H_2S (tpy)
AU-1	-	-	-	-	0.0	0.0	-	-	-	-	-	-	0.0	0.0
AU-Rb 1	1.5	6.4	1.2	5.4	0.1	0.4	0.2	0.7	0.1	0.5	0.1	0.5	0.4	1.8
AU-Rb 2	1.5	6.4	1.2	5.4	0.1	0.4	0.2	0.7	0.1	0.5	0.1	0.5	0.4	1.8
FL-1[3]	1.9	8.2	16.0	70.0	1.4	6.1	0.9	3.7	1.0	4.2	1.0	4.2	0.02	0.1

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO_2.
2 Title V annual fee assessments are based on the sum of allowable tons per year emission limits in Sections A106 and A107.
3 Flare emission limits includes pilot gas, assist gas and process gas.
"-" 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.

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
This permit condition is a state only enforceable permit condition.

Unit No.	Description	VOC (tpy)
SSM/M Compressor Blowdown Venting for Unit Numbers 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240, ENG-9, ENG-10	[1]This emission limit includes SSM/M emissions from compressor blowdown venting from 3 permitted compressor model types. The permittee must demonstrate compliance with this limit in accordance with Condition A107.C.	10.0

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 B110.E.

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. Method for Determining Compliance with the Startup, Shutdown, Maintenance, and Malfunction Compressor Blowdown Venting Emission Limit in Table 107.A

This permit condition is a state only enforceable permit condition.

Requirement: The permittee shall comply with this condition to determine compliance with the allowable emission limit in Table 107.A. The allowable emission limit in Table 107.A was based upon the applicant's worst-case scenario and was calculated using the maximum volume of gas that can be vented from each permitted compressor model (Maximum Volume of Gas). The permittee shall calculate the emissions from each compressor blowdown event using the calculation provided below.

(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 compressor blowdown 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 compressor blowdown event using the following calculations for each compressor model type.

(d) Each calendar month, the permittee shall calculate the total monthly emissions from all compressor blowdown events for each compressor model type.

(e) For each compressor blowdown event, the permittee shall calculate the emissions resulting from the event. The calculation shall be based on the Maximum Volume of Gas released during the compressor blowdown event multiplied by the maximum VOC content of the vented gas, and shall be performed using the example calculations below:

For Caterpillar Model 3516J: [3,185.8 scf/event] x [22.6 lb/lb-mol] x [wt %VOC] / [397.5 scf/lb-mol] x [2,000 lb/ton] = VOC emissions per event (tpy)

For Caterpillar Model 3606A4: [4,285.9 scf/event] x [22.6 lb/lb-mol] x [wt %VOC] / [397.5 scf/lb-mol] x [2,000 lb/ton] = VOC emissions per event (tpy)

For Caterpillar Model 3608: [6,184.9 scf/event] x [22.6 lb/lb-mol] x [wt %VOC] / [397.5 scf/lb-mol] x [2,000 lb/ton]= VOC emissions per event (tpy)

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

(a) All emissions due to routine or predictable startup, shutdown, and/or maintenance (SSM) must be included and shall not exceed the 10 tpy SSM/M emission limit in this permit. For emissions due to malfunctions, the permittee has the option to report these as excess emissions of the emission limit Table 107.A in accordance with 20.2.7 NMAC, or include the emissions under the 10 tpy limit.

(b) Once emissions from a malfunction event are submitted in the excess emissions final report (due no later than ten days after the end of the excess emissions event) per 20.2.7.110.A(2) NMAC, the event is considered an excess emission and cannot be applied toward the 10 tpy SSM/M limit in this permit.

(3) **Emissions Exceeding the Permit Limit**

If the monthly rolling 12-month total of SSM/M exceeds the 10 tpy 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 not be included under the 10 tpy SSM/M emission limit. These emissions 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/M other than compressor blowdowns 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 compressor blowdown event and shall record the specific information as required in the condition below.

(3) The permittee shall monitor and record the specific compressor causing the blowdown 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 compressor blowdown events during the first 12 months and, thereafter the monthly rolling 12-month total VOC emissions from all compressor blowdown 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 whether emissions are included under the 10 tpy emission limit for SSM/M or if the event is included in a final excess emissions report per 20.2.7.110.A(2) NMAC.

(6) The permittee shall monitor in accordance with Condition B108 of this permit.

Recordkeeping:

(1) **Recording for Compliance Determination**

(a) For each compressor blowdown 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, corresponding to each compressor,

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

(b) For each compressor blowdown event, the permittee shall identify the compressor and shall identify the cause of the event that is the source of emissions.

(c) The permittee shall record each compressor blowdown event and the total number of events each year for each compressor.

(d) Each month, the permittee shall record the cumulative total VOC emissions from compressor blowdown events during the first 12 months and, thereafter of the monthly rolling 12-month total VOC emissions from blowdown 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) **Emissions included Under Permit Limit or Reported as Excess Emissions**

The permittee shall record whether emissions are included under the 10 tpy permit limit for compressor blowdown events or if the event is included in a final excess emissions report per 20.2.7.110.A(2) NMAC.

(3) **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.

A108 Facility: Hours of Operation

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

A109 Facility: Reporting Schedules (20.2.70.302.E NMAC)

A. A Semi-Annual Report of monitoring activities is due within 45 days following the end of every 6-month reporting period. The six month reporting periods start on May 1st and November1st of each year.

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

A110 Facility: Fuel and Fuel Sulfur Requirements

A. Fuel and Fuel Sulfur Requirements (Units 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240, ENG-9, ENG-10, and Rbl-1, Rbl-2, Rbl-3, AU-Rb1, and AU-Rb2, and pilot/assist gas for FL-1)

Requirement: All combustion emission units shall combust only natural gas containing no more than 5.0 grains of total sulfur per 100 dry standard cubic feet. For reboiler units Rbl-1, Rbl-2, Rbl-3, AU-Rb1, and AU-Rb2, and flare (FL-1) pilot/assist gas, the 5.0 grains applies to natural gas fuel and not when the units are receiving process gas for combustion. (NSR 7960-M2, condition A110.A)

Monitoring: None. Compliance is demonstrated through records.

Recordkeeping:

(1) The permittee shall demonstrate compliance with the natural gas or fuel oil limit on total sulfur content by maintaining records of a current, valid purchase contract, tariff sheet or transportation contract for the gaseous or liquid fuel, or fuel gas analysis, specifying the allowable limit or less.

(2) If fuel gas analysis is used, the analysis shall not be older than **one year**.

(3) Alternatively, compliance shall be demonstrated by keeping a receipt or invoice from a

commercial fuel supplier, with each fuel delivery, which shall include the delivery date, the fuel type delivered, the amount of fuel delivered, and the maximum sulfur content of the fuel.
Reporting: The permittee shall report in accordance with Section B110.

A111 Facility: 20.2.61 NMAC Opacity

A. 20.2.61 NMAC Opacity Requirements (Units 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240, ENG-9, ENG-10, RBL-1, RBL-2, RBL-3, AU-RB1, AU-RB2)

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 7960-M2, condition A111.A)

Monitoring:

(1) Use of natural gas fuel constitutes compliance with 20.2.61 NMAC unless opacity equals or exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during operation other than during startup mode, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Reference Method 9 (EPA Method 9) as required by 20.2.61.114 NMAC, or the operator will be allowed to shut down the equipment to perform maintenance/repair to eliminate the visible emissions. Following completion of equipment maintenance/repair, the operator shall conduct visible emission observations following startup in accordance with the following procedures:

(a) Visible emissions observations shall be conducted over a 10-minute period during operation after completion of startup mode in accordance with the procedures at 40 CFR 60, Appendix A, Reference Method 22 (EPA Method 22). If no visible emissions are observed, no further action is required.

(b) If any visible emissions are observed during completion of the EPA Method 22 observation, subsequent opacity observations shall be conducted over a 10-minute period, in accordance with the procedures at EPA Method 9 as required by 20.2.61.114 NMAC.

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

Recordkeeping:

(1) If any visible emissions observations were conducted, the permittee shall keep records in accordance with the requirements of Section B109 and as follows:

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

(b) For any opacity observations conducted in accordance with the requirements of EPA Method 9, record the information on the form referenced in EPA Method 9, Sections 2.2 and 2.4.

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

EQUIPMENT SPECIFIC REQUIREMENTS

OIL AND GAS INDUSTRY

A200 Oil and Gas Industry

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

A201 Engines

A. Initial Compliance Test (Units ENG 9 and ENG 10)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by performing an initial compliance test. (NSR 7960-M2, condition A201.A, revised)

Monitoring:

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

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

The monitoring exemptions of Section B108 do not apply to this requirement.

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

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

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.

B. Periodic Emissions Testing (Units 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240, ENG-9, ENG-10)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by completing periodic emission tests during the monitoring period. (NSR 7960-M2, condition A201.B, revised)

Monitoring: The permittee shall test using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. Emission testing is required for NOx and CO and shall be carried out as described below.
Test results that demonstrate compliance with the CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

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

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

(1) The testing shall be conducted as follows:
(a) Testing frequency shall be once per quarter.
(b) The monitoring period is defined as a calendar quarter.

(2) The first test shall occur within the first monitoring period after completion of the initial compliance test.
(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.

C. Catalytic Converter Operation (Units 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240, ENG-9, ENG-10)

Requirement: Compliance with the allowable limits in Table 106.A shall be demonstrated by ensuring that the units shall be equipped and operated with an oxidation catalytic converter to control CO and VOC emissions.

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 7960-M2, condition A201.D)

Monitoring: The units 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(s); or (2) replace the catalyst with a functionally equivalent spare to allow the engine to remain in operation.

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

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

D. 40 CFR 60, Subpart JJJJ (Units 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240)

Requirement: The units are subject to 40 CFR 60, Subparts A and JJJJ if the unit is 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. (NSR 7960-M2, condition A201.F)

Monitoring: The permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4243.

Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4245.

Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4245.

E. 40 CFR 60, Subpart JJJJ (Potentially Units ENG-9, ENG-10)

Requirement: The units will be subject to 40 CFR 60, Subparts A and JJJJ if the unit is 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. (NSR 7960-M2, condition A201.F)
Monitoring: The permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4243.
Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4245.
Reporting: The permittee shall comply with all applicable reporting requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4245.

F. 40 CFR 63, Subpart ZZZZ (Units 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240)

Requirement: The units are 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. (NSR 7960-M2, condition A201.G)
Monitoring: The permittee shall comply with all applicable monitoring requirements of 40 CFR 63, Subpart A and Subpart ZZZZ.
Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63, Subpart A and Subpart ZZZZ, including but not limited to 63.6655 and 63.10.
Reporting: The permittee shall comply with all applicable reporting requirements of 40 CFR 63, Subpart A and ZZZZ, including but not limited to 63.6645, 63.6650, 63.9, and 63.10.

G. 40 CFR 63, Subpart ZZZZ (Potentially Units ENG-9, ENG-10)

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. (NSR 7960-M2, condition A201.G)
Monitoring: The permittee shall comply with all applicable monitoring requirements of 40 CFR 63, Subpart A and Subpart ZZZZ.
Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements of 40 CFR 63, Subpart A and Subpart ZZZZ, including but not limited to 63.6655 and 63.10.
Reporting: The permittee shall comply with all applicable reporting requirements of 40 CFR 63, Subpart A and ZZZZ, including but not limited to 63.6645, 63.6650, 63.9, and 63.10.

A202 Glycol Dehydrators

A. Extended Gas Analysis and GRI-GLYCalc Calculation (Units Dehy-1, Dehy-2, and Dehy-3)

Requirement: Compliance with the allowable VOC emission limits in Table 106.A shall be demonstrated by conducting an annual extended gas analysis on the dehydrator inlet gas and by calculating emissions using GRI-GLYCalc. (NSR 7960-M2, condition A202.A)
Monitoring: The permittee shall conduct an annual 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 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 GRI-GLYCalc model. The permittee shall keep a record of the results, noting the VOC and HAP emission rates for the dehydrator obtained from estimates using GRI-GLYCalc.
Reporting: The permittee shall report in accordance with Section B110.

B. Glycol pump circulation rate (Units Dehy-1, Dehy-2, and Dehy-3)

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 and shall not exceed 720 gallons per hour (12 gallons per minute). (NSR 7960-M2, condition A202.B)
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 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. Condenser and Flash Tank System for (Units Dehy 1-3 & BTEX-1, BTEX-2, BTEX-3)

Requirement: To demonstrate compliance with the allowable VOC emission limits in Table 106.A: (NSR 7960-M2, condition A202.C) (1) The still vent emissions shall be routed to the condenser. (2) The condensers (BTEX-1, 2 & 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 (reboiler units Rbl-1, Rbl-2, Rbl-3) or the plant inlet, and not released to the atmosphere. (4) The condenser and flash tank shall be operational at all times the facility is in operation. The condenser and flash tank shall be installed, operated, and maintained according to manufacturer's specifications.
Monitoring: The permittee shall inspect the glycol dehydrator and the control equipment semi-annually to ensure it is operating as initially designed. The permittee shall also inspect that the reboiler is 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.
Reporting: The permittee shall report in accordance with Section B110.

D. 40 CFR 63, Subpart HH (Units Dehy-1, Dehy-2, and Dehy-3)

Requirement: The unit is 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. (NSR 7960-M2, condition A202.D)
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

A. Tank Throughput (Units TK 1-4)

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 all units to 923,419 gallons per year (21,986.2 barrels/year). (NSR 7960-M2, condition A203.A)
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 923,419 gallons per year. (NSR 7960-M2, condition A203.B)
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.
Reporting: The permittee shall report in accordance with Section B110.

A204 Heaters/Boilers

A. Operational Inspection of Boilers and/or Heaters (Units RBL-1, RBL-2, RBL-3, AU-RB1, AU-RB2)

Requirement:

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

(NSR 7960-M2, condition A204.A, revised)
Monitoring: (1) Inspections shall be completed at least once per month. (2) At a minimum, inspections shall include the following: (a) checking indicators to verify that the optimal amount of excess combustion air is introduced into the boiler combustion process such as a blue colored, steady flame; (b) inspections of the unit(s) components and housing for cracks or worn parts.
Recordkeeping: (1) The permittee shall maintain records of operational inspections, including the indicators used to verify optimal excess combustion air, a description of the indicators, the unit component and housing inspections, and any adjustments needed to ensure optimal operation of the unit. (2) The permittee shall also keep records of the manufacturer's recommended or the permittee's facility specific operational inspection procedure and shall keep records of the percent of excess combustion air required for optimal performance. (3) The permittee shall maintain records in accordance with Section B109.
Reporting: The permittee shall report in accordance with Section B110.

B. 40 CFR 60, Subpart Dc (Units AU-RB1 and AU-RB2)

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 and the Section B110 of the permit.

A205 Turbines – Not Required

A206 Flares

A. Flare Construction and Stack Height (Unit FL-1)

Requirement: Compliance with the applicable NMAAQS, NAAQS, and PSD increment for Class I and Class II shall be demonstrated by constructing the Unit FL-1 flare to the parameters used in the Air Dispersion Modeling. The new Unit FL-1 flare height shall be a minimum of 20.0 feet above ground. The amine unit still vent (Unit AU-1) shall be connected by hard piping to the Unit FL-1 flare. The Unit FL-1 flare must be constructed as described in the permit application and all subsequent materials submitted by the applicant. (NSR 7960-M2, condition A206.A)
Monitoring: The permittee shall construct the Unit FL-1 flare as required and maintain a copy of the stamped engineering specification sheet and as-built drawing.
Recordkeeping: Records shall be kept in accordance with Condition B109 of the post-

construction inspections, engineering stamped specification sheets, and as-built drawing.

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

B. Flare Flame & Visible Emissions (20.2.61 NMAC) (Unit FL-1)

Requirement: Compliance with the allowable emission limits in Section A106 shall be demonstrated by the flare(s) 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. (NSR 7960-M2, condition A206.B)

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.

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

(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.

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

C. Flare Gas Flow Monitoring and Gas Analysis (Unit FL-1)

Requirement: Compliance with the flare allowable emission limits in Table 106.A shall be demonstrated by completing the monitoring, recordkeeping, and reporting required by this condition and Condition A206.D. 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 7960-M2, condition A206.C)

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

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

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

(1) Gas Flow:

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

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

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

(3) Calibration: Records of all flowmeter and inline monitor certifications, calibrations, data capture calculations and documentation as specified by Condition B108.H, as well as any breakdowns, reasons for the breakdown, and corrective actions. The permittee shall also maintain a copy of the manufacturer specifications for operation and calibration or the site-specific operations and maintenance plan for flowmeters and inline monitors.

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

D. Flare Emissions Calculation (Unit FL-1)

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.C and completing emissions calculations as specified in this condition. (NSR 7960-M2, condition A206.D)

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

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

(1) Hourly Emissions Calculations: The permittee shall calculate the pounds per hour (pph) NOx, CO, VOC, SO_2, and H_2S emission rates using these parameters:

(a) the calculated average hourly flow rate of all gas combusted by the flare, including pilot, purge, and assist gas, if applicable, from Condition A206.C;

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

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

(d) VOC and H_2S emission rates calculated using the destruction efficiency represented in the permit application and approved by the Department.

(2) Annual Emissions Calculations: The permittee shall calculate the total ton per year (tpy) emission rates as a daily rolling 12-month total, using the totaled pph emission rates for each hour of the day:

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

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

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

A207 Sulfur Recovery Unit – Not Required

A208 Amine Unit

A. Amine Unit Control and Flare Operating Requirements (Unit FL-1 and Amine Reboilers AU-RB1 and AU-RB2 Controlling AU-1)

Requirement: Compliance with the allowable emission limits in Table 106.A shall be demonstrated by: (NSR 7960-M2, condition A208.A, revised, and A208.B, revised)

(1) The permittee shall ensure that all off gases from the amine still vent (Unit AU-1) are at all times routed to the Flare (Unit FL-1) and the amine reboilers (AU-RB1 and AU-RB2). The flare and amine reboilers shall be operational at all times emissions are sent to them.

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

(3) Amine unit off gases that are routed to the amine reboilers shall not exceed reboiler capacity to effectively combust the process gases. The amine reboilers shall also comply with conditions A110.A Fuel and Fuel Sulfur, and A204.A Operational Inspection of Boilers and Heaters.

(4) 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: The permittee shall inspect the amine unit and its control equipment semi-annually, or more frequently as required by other conditions, to ensure the amine unit (AU-1) is controlled as required and operating in accordance with the manufacturer's recommended operating and maintenance procedures.

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

(5) 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.

(6) The permittee shall maintain a copy of the manufacturer's maintenance recommendations.

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

A209 Fugitives – Compressor Stations

A. 40 CFR 60, Subpart OOOOa (Unit FUG-1)

Requirement: The unit 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. (NSR 7960-M2, condition A209.A, revised)

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.

A210 Acid Gas Injection – Not Required

A211 40 CFR 60, Subparts OOOO and OOOOa Compressors

A. 40 CFR 60, Subpart OOOOa (Compressors associated with Units 3347, 3346, 3171, 3155, 3338, 3339, 3319, 3240)

Requirement: The units are subject to 40 CFR 60, Subparts A and OOOOa if the source is constructed, modified, or reconstructed after the applicability date in 40 CFR 60.5365a and meets the applicability criteria specified at §60.5365a(c). The permittee shall comply with the notification requirements in Subpart A and the specific requirements of Subpart OOOOa, including standards in §60.5385a.
Monitoring: The permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to §60.5410a, §60.5411a, §60.5415a, and §60.5416a.
Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to §60.5420a.
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 (Potential Compressors associated with Units ENG-9, ENG-10)

Requirement: The units will be subject to 40 CFR 60, Subparts A and OOOOa if the source is constructed, modified, or reconstructed after the applicability date in 40 CFR 60.5365a and meets the applicability criteria specified at §60.5365a(c). The permittee shall comply with the notification requirements in Subpart A and the specific requirements of Subpart OOOOa, including standards in §60.5385a.
Monitoring: The permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to §60.5410a, §60.5411a, §60.5415a, and §60.5416a.
Recordkeeping: The permittee shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart OOOOa, including but not limited to §60.5420a.
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.

COMPLIANCE ASSURANCE MONITORING

A800 40 CFR 64, Compliance Assurance Monitoring (CAM) Plan

A. Facility CAM Requirements per 40 CFR 64 – Amine Unit AU-1 (see Condition A801.A for the CAM Plan)

Requirement: Compliance Assurance Monitoring (CAM) contained in 40 CFR 64 applies to

the amine unit (AU-1) and its primary control device the flare (FL-1) including additional control via the amine reboilers (AU-RB1 and AU-RB2). The permittee shall meet the requirements of the Provisions in Subparts 64.3(a) and (b); 64.7(d)(2); and 64.8, if applicable.
Monitoring: The permittee shall monitor the following indicators according to the approved CAM Plan in Condition A801 and pursuant to 40 CFR 64.3(a) and (b): presence of pilot flame, visible emissions absent/present, and totalized gas flow volume. The permittee shall continue the monitoring pursuant to 40 CFR 64.7. The permittee shall comply with the measurement approach, performance criteria, and defined excursion for each indicator range or condition that is described in the approved CAM Plan in Condition A801 (40 CFR 64.6(c)). The frequency of data collection shall be at least once every 24 hours per 40 CFR 64.3(b)(4)(i) and (iii). The permittee shall respond to any excursion of indicator range or condition in accordance with the CAM Plan and 40 CFR 64.7(d).
Recordkeeping: The permittee shall meet the recordkeeping requirements of the CAM Plan and of 40 CFR 64.9(b).
Reporting: The permittee shall meet the reporting requirements in 40 CFR 64.9(a) and in Section B110. Pursuant to 40 CFR 64.7(e), the permittee shall document and promptly notify the Department's Permit Section, and modify the permit as necessary, of the need for improved monitoring or the need to modify existing indicator ranges or designated conditions pursuant to 40 CFR 64.7(e).

B. Facility CAM Requirements per 40 CFR 64 – Dehydrator Units Dehy-1, Dehy-2, and Dehy-3 (see Condition A801.B for the CAM Plan)

Requirement: Compliance Assurance Monitoring (CAM) contained in 40 CFR 64 applies to the dehydrator units (Dehy-1, Dehy-2, and Dehy-3) and control equipment BTEX units (BTEX-1, BTEX-2, and BTEX-3) that vent to the reboilers (RBL-1, RBL-2, and RBL-3). The permittee shall meet the requirements of the Provisions in Subparts 64.3(a) and (b); 64.7(d)(2); and 64.8, if applicable.
Monitoring: The permittee shall monitor the following indicators according to the approved CAM Plan in Condition A801 and pursuant to 40 CFR 64.3(a) and (b): glycol circulation rate and reboiler temperature. The permittee shall continue the monitoring pursuant to 40 CFR 64.7. The permittee shall comply with the measurement approach, performance criteria, and defined excursion for each indicator range or condition that is described in the approved CAM Plan in Condition A801 (40 CFR 64.6(c)). The frequency of data collection shall be at least once every 24 hours per 40 CFR 64.3(b)(4)(i) and (iii). The permittee shall respond to any excursion of indicator range or condition in accordance with the CAM Plan and 40 CFR 64.7(d).
Recordkeeping: The permittee shall meet the recordkeeping requirements of the CAM Plan and of 40 CFR 64.9(b).
Reporting: The permittee shall meet the reporting requirements in 40 CFR 64.9(a) and in Section B110. Pursuant to 40 CFR 64.7(e), the permittee shall document and promptly notify the Department's Permit Section, and modify the permit as necessary, of the need for improved monitoring or the need to modify existing indicator ranges or designated conditions pursuant to 40 CFR 64.7(e).

A801 Compliance Assurance Monitoring (CAM) Plans – Amine Unit and Dehydrator Units

A. CAM Plan for Amine Unit AU-1

CAM Monitoring Protocols

40 CFR 64.2 states that the requirements of this part shall apply to an emissions unit at a majorsource if the unit satisfies *all* the following criteria:

1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant;

2) The unit uses a control device to achieve compliance with any such emission limitation orstandard; and

3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year,required for a source to be classified as a major source.

The operational emissions controlled by flare (Unit FL-1) are subject to the CAM requirement.

Background

Emissions Unit

Description:	AU-1
Identification:	AU-1
Facility:	Big Lizard Compressor Station

Applicable Regulations and Pre-CAM Monitoring Requirements

Regulations:	Operation and reporting requirements created in NSR Permit 7960-M2 et seq. to establish federally enforceable emission limits for AU-1 and the control FL-1.
Emission Limits FL-1:	6.08 tpy VOC 0.07 tpy H_2S
Pre-CAM Monitoring Requirements:	Continuously monitor the presence of a flare pilot flame using a thermocouple or equivalent device approved by the Department and equip the device with a continuous recorder and alarm or equivalent, to detect the presence of a flame. See Section A206.A in NSR Permit 7960-M2 for details. At least once per year during a flaring event, as well as any time visible emissions are observed, conduct a visible emissions observation in accordance with the requirements of 40 CFR 60, Appendix A, Reference Method 22. See Section A206.A in NSR

Permit 7960-M2 for details.

Install gas flowmeters and flow totalizers equipped with a chart recorder or data logger to monitor gas flow and record the total standard cubic feet of gas sent to the flare, including purge gas, pilot gas, assist gas, and process gas. See Section A206.B in NSR Permit 7960-M2 for details.

Control Technology and Potential Emissions Rates

Controls:	Flare (Unit FL-1)
Potential pre-control device emissions AU-1:	278.73 tpy VOC
	1.95 tpy H_2S
Potential post-control device emissions:	98% controlled, 6.08 tpy VOC
	98% controlled, 0.07 tpy H_2S

Compliance Assurance Monitoring Plan

AU-1 emissions will be controlled by a flare (Unit FL-1). There are several components to the CAM for Unit FL-1. The monitoring of the flare pilot is continuous; any outages will signal an alarm and be recorded. Visible emissions will be monitored annually using Method 22 during a flaring event or any time visible emissions are observed. Flow volume is monitored and recorded continuously with a flow meter.

Justification

The flare should be designed and operated with no visible emissions. Efficient combustion can be assumed if there are no visible emissions. By design, a well-maintained thermocouple (or equivalent) based alarm system will indicate whether a flame is present. The absence of the flame would indicate failure to control emissions. Measurement of totalized flow volume will determine if the flow volume is in line with the permit representations and associated emission limitations. Excursions of the flare system that monitors the presence of combustion or visual emissions will trigger an inspection, corrective action, and reporting. The key elements of the monitoring approach are presented in the table below.

Monitoring Approach: Big Lizard Compressor Station, Unit AU-1, FL-1

	Indicator No. 1	**Indicator No. 2**	**Indicator No. 3**
I. Indicator [64.4(a)(1)]	Pilot Flame	Presence of Visible Emissions	Totalized Flow Volume
Measurement Approach	Pilot flame is constantly monitored using a thermocouple or infrared (IR) device as approved by the Division.	The flare will be monitored for visible emissions in accordance with 40 CFR 60, Appendix A, Reference Method 22 once per year during a flaring event, or any time visible emissions are observed.	Gas flow, including process, pilot, purge, and assist gas, to the flare will be measured continuously with gas flowmeters and flow totalizers that are equipped with a chart recorder or data logger.
II. Indicator Range [64.4(a)(2)]	Pilot flame present (sensed) or no pilot flame present (sensed).	Visible emissions are present or not present in accordance with 40 CFR 60, Appendix A, Reference Method 22.	Gas flow rates will be logged each hour and each month that the flare is operational. These calculated values are compared to the most recent permit limits.
III. Performance Criteria			
A. Data Representativeness [64.3(b)(1)]	Destruction depends upon the presence of a flame. If the flame is not present, VOCs and H_2S are not being destroyed.	Efficient combustion is assumed if no visible emissions are observed.	Calculation of emission rates on an hourly and monthly basis demonstrates compliance with permitted emission limitations.
B. Verification of Operational Status [64.3(b)(2)]	Thermocouple and/or equivalent device visually checked quarterly, and the alarm tested twice per year.	Visible emissions will be determined in accordance with 40 CFR 60, Appendix A, Reference Method 22.	The flow meter(s) and totalizer(s) will be operated, calibrated, and maintained as specified by the manufacturer or

			equivalent and as necessary to ensure correct and accurate readings.
C. QA/QC Practices and Criteria [64.3(b)(3)]	Proper operation of the flare achieved by maintaining the non-combustion thermocouple or IR device with alarm system. Thermocouple or IR device visually checked quarterly, and the alarm tested twice per year.	Visible emissions will be determined in accordance with 40 CFR 60, Appendix A, Reference Method 22.	The flow meter(s), totalizer(s) will be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings. The total sulfur content, the VOC content, and the heating value (Btu/scf) sent to flare will be measured at least once annually with an extended gas analysis. The H_2S content will be measured at least quarterly using a stain tube of the appropriate size range or an inline H_2S monitor or measured annually with an extended gas analysis. The new information from the annual and quarterly analyses are used in the calculations to ensure data quality.
C. Monitoring Frequency [64.3(b)(4)]	The presence of a pilot flame is monitored continuously. The thermocouple and/or IR will be monitored quarterly, and the alarm monitored semiannually.	Monitoring of visible emissions will occur once per year during a flaring event, or any time visible emissions are observed.	Flow is continuously measured with totalized flow rate measured once per 24-hour period.
D. Data Collection Procedures [64.3(b)(4)]	Presence or absence of flame will be recorded in a log. Instances of alarm activation, including the date and cause of alarm activation, actions	Records shall be maintained of all visible emissions observations.	Gas flow rates are logged each hour and each month that the flare is in operation. Records of flowmeter and totalizer certifications, calibrations, breakdowns,

	taken to bring flare into normal operating conditions, and maintenance activities will also be recorded.		reasons for breakdowns, and corrective actions are kept.
E. Averaging Period [64.3(b)(4)]	Not applicable.	Method 22 shall be conducted over a 30-minute time period or the full duration of the event, whichever is shorter.	Hourly.

B. CAM Plan for Dehydrator Units Dehy-1, Dehy-2, and Dehy-3

CAM Monitoring Protocols

40 CFR 64.2 states that the requirements of this part shall apply to an emissions unit at a major source if the unit satisfies *all* the following criteria:

1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant;

2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and

3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

The Dehydrators units Dehy-1, Dehy, 2, and Dehy 3, controlled by Reboilers units RBL-1, RBL-2, RBL-3, BTEX-1, BTEX-2, and BTEX-3 are subject to the CAM requirement.

Background

Emissions Unit

Description:	Dehydrators
Identification:	Units Dehy-1, Dehy-2, and Dehy-3
Facility:	Big Lizard Compressor Station

Applicable Regulation(s) and Pre-CAM Monitoring Requirements

Regulation(s): Operation and reporting requirements created in NSR Permit 7960-M2 et seq. to establish federally enforceable emission limits for Dehy-1, Dehy-2, and Dehy-3 controlled by RBL-1, RBL-2, RBL-3, BTEX-1, BTEX-2, and BTEX-3.

Pre-CAM Monitoring Requirements: Visual inspections

Control Technology and Potential Emissions Rates

Controls:	RBL-1, RBL-2, RBL-3, BTEX-1, BTEX-2, BTEX-3
Capture System:	Closed loop system
Potential pre-control device emissions:	965.73 tpy VOC
Potential post-control device emissions:	95% controlled, 9.29 tpy VOC

Compliance Assurance Monitoring Plan

Dehy-1, Dehy-2, and Dehy-3 emissions will be controlled by BTEX units (Units BTEX-1, BTEX-2, BTEX-3) and reboilers (Units RBL-1, RBL-2, RBL-3). There are several components to the CAM for Unit FL-1. The monitoring of the Dehy units and controls will utilize visual inspections and SCADA systems.

Justification

The reboilers and BTEX units will be operated and maintained according to manufacturer specifications. Monitoring of these units will align with sections A202.B, A202.C, and A204.A in NSR Permit 7960-M2

Monitoring Approach: Big Lizard Compressor Station – Dehy-1, Dehy-2, Dehy-3

	Indicator No. 1	**Indicator No. 2**
I. Indicator [64.4(a)(1)]	Glycol Circulation	Reboiler Temperature
Measurement Approach	Glycol circulation is constantly measured on the device	Reboiler temperature is monitored in SCADA
II. Indicator Range [64.4(a)(2)]	Glycol circulation counted or glycol circulation not present	180 degrees and above, the reboiler is functioning properly; below 180 degrees, the reboiler is not functioning
III. Performance Criteria		
A. Data Representativeness [64.3(b)(1)]	Glycol dehydrators depend on glycol circulation and if there is no circulation present, it is not functioning correctly.	VOC destruction relies on reboilers to be functioning. If the reboiler is not functioning, there is no VOC destruction.
B. Verification of Operational Status [64.3(b)(2)]	Glycol circulation rates will be monitored and recorded quarterly.	Reboiler temperature will be monitored in SCADA and checked on location periodically.
C. QA/QC Practices and Criteria [64.3(b)(3)]	Proper operations of the Glycol dehydrators will be determined by inspections and recorded data.	Temperature data will be monitored and verified by doing inspections.
D. Monitoring Frequency [64.3(b)(4)]	Glycol flow rate will be monitored quarterly.	Reboiler temperatures will be monitored daily.
E. Data Collection Procedures [64.3(b)(4)]	Records will be maintained of glycol flow rates on a quarterly basis.	Records of reboiler temperatures are stored in the SCADA database.
F. Averaging Period [64.3(b)(4)]	Quarterly.	N/A

PART B GENERAL CONDITIONS (Attached)

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