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RYAN FLYNN  
CABINET SECRETARY

BUTCH TONGATE  
DEPUTY SECRETARY

**NEW SOURCE REVIEW PERMIT**  
Issued under 20.2.72 NMAC

Certified Mail No: 7013-0600-0001-7377-2237

Return Receipt Requested:

<b>NSR Permit No:</b>	PSD-5217
<b>Facility Name:</b>	Zia II Gas Plant
<b>Permittee Name:</b>	DCP Midstream, L.P.
<b>Mailing Address:</b>	10 Desta Drive, Suite 400 West Midland, TX 79705
<b>TEMPO/IDEA ID No:</b>	32800-PRN20130001
<b>AIRS No:</b>	35 025 0571
<b>Permitting Action:</b>	New NSR PSD Permit
<b>Source Classification:</b>	TV Major and PSD Major
<b>Facility Location:</b>	32°38'34.88" N and 103°48'31.92" W
<b>County:</b>	Lea
<b>Air Quality Bureau Contact</b>	Jim Nellessen
<b>Main AQB Phone No.</b>	(505) 476-4300

  
Richard L. Goodyear, PE

Bureau Chief  
Air Quality Bureau

APR 25 2014

Date



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**PART A      FACILITY SPECIFIC REQUIREMENTS**

**A100 Introduction**

- A. This is a new Prevention of Significant Deterioration (PSD) permit. The facility is PSD major for NOx, CO, VOC, SOx, PM10, PM2.5, and GHG.
- B. The permitted allowable Best Available Control Technology (BACT) emission limits identified as BACT in [Tables 106.A, 106.B, 107.A](#), and elsewhere within individual conditions, were determined through a PSD BACT review and determination in accordance with NMAC 20.2.74 Permits – Prevention of Significant Deterioration. Any change or revision of these BACT limits and their corresponding control technology or operational requirements must be applied for and accompanied by a corresponding re-evaluation of the original BACT determination (20.2.74.302 NMAC).

**A101 Permit Duration (expiration)**

- A. The term of this permit is permanent unless withdrawn or cancelled by the Department.

**A102 Facility: Description**

- A. The Zia II facility is a natural gas processing plant. The function of the facility is to treat and process natural gas from DCP gathering systems located throughout southeast New Mexico. The facility will utilize a cryogenic gas process and be designed to operate at 230 MMscf/day of natural gas. Processing includes the removal of water, carbon dioxide, hydrogen sulfide, extraction of natural gas liquids, and reinjection of acid gases. This is a new facility. The description of this new facility is for informational purposes only and is not enforceable.

- B. This facility is located approximately 28 miles northeast of Carlsbad, New Mexico in Lea County.
- C. [Table 102.A](#) and [Table 102.B](#) show the total potential emissions from this facility for information only, not an enforceable condition. This table does not include sources or activities without emissions or not regulated pursuant to the Act.

**Table 102.A: Total Potential Pollutant Emissions from Entire Facility**

Pollutant	Emissions (tons per year)*
Nitrogen Oxides (NO <sub>x</sub> )	316.3
Carbon Monoxide (CO)	127.6
Volatile Organic Compounds (VOC)	158.4
Sulfur Dioxide (SO <sub>2</sub> )	100.8
Total Suspended Particulates (TSP)	24.9
Particulate Matter less than 10 microns (PM <sub>10</sub> )	23.8
Particulate Matter less than 2.5 microns (PM <sub>2.5</sub> )	23.3
Hydrogen Sulfide (H <sub>2</sub> S)	1.4
Greenhouse Gas (GHG)	378,991

\* Totals include emissions from Fugitives and SSM.

**Table 102.B: Total Potential HAPs\* that exceed 1.0 ton per year**

Pollutant	Emissions (tons per year)
Acetaldehyde; (Ethyl aldehyde)	14.1
Acrolein	8.1
Benzene	2.1
Butadiene (1,3-)	1.4
Ethylbenzene	2.6
Formaldehyde	25.5
Hexane (n-)	4.8
Methanol; (Methyl alcohol)	5.1
Styrene	2.5
Toluene; (Methyl benzene)	2.3
Trimethylpentane (2,2,4-)	3.8
Xylenes (total); (Xylol)	2.2
Total HAPs**	77.6

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

\*\* The total HAP emissions may not agree with the sum of individual HAPs because only individual HAPs greater than 1.0 ton 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**

<b>Applicable Requirements</b>	<b>Federally Enforceable</b>	<b>Unit No.</b>
20.2.1 NMAC General Provisions	X	Entire facility
20.2.3 NMAC Ambient Air Quality Standards	X	Entire facility
20.2.7 NMAC Excess Emissions	X	Entire facility
20.2.35 NMAC Natural Gas Processing Plant – Sulfur		Entire facility
20.2.37 NMAC Petroleum Processing Facilities		Entire facility
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
20.2.74 NMAC Permits – Prevention of Significant Deterioration (PSD)	X	Entire facility
20.2.75 NMAC Construction Permit Fees	X	Entire facility
20.2.77 NMAC New Source Performance	X	C1-E to C13-E, C1-C to C13-C, H1, H4, H5, FUG, FL1, FL2
20.2.80 NMAC Stack Heights	X	Entire facility
20.2.82 NMAC MACT Standards for Source Categories of HAPS	X	C1-E to C13-E, Dehy, and H1 to H6
40 CFR 50 National Ambient Air Quality Standards	X	Entire facility
40 CFR 60, Subpart A, General Provisions	X	C1-E to C13-E, C1-C to C13-C, H1, H4, H5, FUG, FL1, FL2
40 CFR 60, Subpart Db	X	H4 and H5
40 CFR 60, Subpart Dc	X	H1
40 CFR 60, Subpart JJJJ	X	C1-E to C13-E
40 CFR 60, Subpart OOOO	X	C1-C to C13-C, and equipment leaks (FUG)
40 CFR 63, Subpart A, General Provisions	X	C1-E to C13-E, Dehy, and H1 to H6
40 CFR 63, Subpart HH	X	Dehy
40 CFR 63, Subpart ZZZZ	X	C1-E to C13-E
40 CFR 63, Subpart DDDDD	X	H1 to H6
40 CFR 68, Chemical Accident Prevention	X	Entire facility

**A104 Facility: Regulated Sources**

- A. Table 104 lists the emission units authorized for this facility. Emission units and/or equipment without emissions or not regulated pursuant to the Act are not included.

**Table 104: Regulated Sources List**

Unit No.	Source Description	Make Model	Serial No.	Capacity	Construction/ Manufacture Dates
Amine	Amine sweetening	TBD	TBD	TBD	TBD <sup>1</sup>
C1-E	4SLB RICE	Caterpillar G3616	TBD	4735 hp	TBD
C2-E	4SLB RICE	Caterpillar G3616	TBD	4735 hp	TBD
C3-E	4SLB RICE	Caterpillar G3616	TBD	4735 hp	TBD
C4-E	4SLB RICE	Caterpillar G3616	TBD	4735 hp	TBD
C5-E	4SLB RICE	Caterpillar G3616	TBD	4735 hp	TBD
C6-E	4SLB RICE	Caterpillar G3616	TBD	4735 hp	TBD
C7-E	4SLB RICE	Caterpillar G3616	TBD	4735 hp	TBD
C8-E	4SLB RICE	Caterpillar G3616	TBD	4735 hp	TBD
C9-E	4SLB RICE	Caterpillar G3608LE	TBD	2370 hp	TBD
C10-E	4SLB RICE	Caterpillar G3608LE	TBD	2370 hp	TBD
C11-E	4SLB RICE	Caterpillar G3608LE	TBD	2370 hp	TBD
C12-E	4SLB RICE	Caterpillar G3608LE	TBD	2370 hp	TBD
C13-E	4SLB RICE	Caterpillar G3608LE	TBD	2370 hp	TBD
C1-C to C13-C	Compressors (reciprocating)	N/A	TBD	N/A	TBD
Dehy	TEG Dehydrator Still Vent/Flash Tank	TBD	TBD	230 MMSCF/d	TBD
FL1	Inlet Gas Flare	TBD	TBD	2.3 MMBTU/hr	TBD
FL2	Acid Gas Flare	TBD	TBD	2.3 MMBTU/hr	TBD
FUG	Facility-wide Fugitives	NA	NA	NA	NA
H1	Trim Reboiler Heater	TBD	TBD	26 MMBTU/hr	TBD
H2	Stabilizer Heater	TBD	TBD	7 MMBTU/hr	TBD
H3	Regeneration Gas Heater	TBD	TBD	8 MMBTU/hr	TBD
H4	Hot Oil Heater	TBD	TBD	114 MMBTU/hr	TBD
H5	Hot Oil Heater	TBD	TBD	114 MMBTU/hr	TBD
H6	TEG Regeneration Heater	TBD	TBD	3 MMBTU/hr	TBD
HAUL	Unpaved Haul Roads	NA	NA	NA	NA
L1	Truck Load-out	TBD	TBD	38,325 Mgal/y	TBD
TK-1	Condensate Tank	TBD	TBD	1000 bbl / 38,325 Mgal/y <sup>2</sup>	TBD
TK-2	Condensate Tank	TBD	TBD	1000 bbl / 38,325 Mgal/y <sup>2</sup>	TBD
TK-C	Produced Water Tank	TBD	TBD	100 bbl / 766,500 gal/y <sup>3</sup>	TBD

Unit No.	Source Description	Make Model	Serial No.	Capacity	Construction/ Manufacture Dates
TK-G	Produced Water Tank	TBD	TBD	300 bbl / 766,500 gal/y <sup>3</sup>	TBD
TK-H	Produced Water Tank	TBD	TBD	300 bbl / 766,500 gal/y <sup>3</sup>	TBD
VCD1	Vapor Combustion Device	TBD	TBD	3.6 MMBTU/hr	TBD

1. All TBD (to be determined) units have been evaluated for anticipated applicability to NSPS and NESHAP requirements. The permittee shall determine applicability for NSPS and NESHAP requirements for all like-kind engine replacements.
2. Total facility condensate throughput of 38,325,000 gal/y for TK1 and TK2 combined, and is equal to Unit L1 (truck load-out).
3. Total facility produced water output (766,500 gal/y; TK-C, TK-G, and TK-H combined).

- B. The Permittee shall report to the Compliance and Enforcement Program Manager the TBD values in Table 104 within 15 days after the initial startup date of each unit.
- C. Units H4 and H5 are permitted with a capacity up to 114 MMBtu/hr. The permittee may install heaters with a lower capacity than 114 MMBtu/hr. Within 15 days of installation of the units, the permittee shall report to the Compliance and Enforcement Program Manager the capacity of each unit and any applicable emission standards in 40 CFR 60 and/or 40 CFR 63.

**A105 Facility: Controls including BACT**

- A. [Table 105](#) lists all the pollution controls requirements for this facility. The installation, configuration, and operation of the controls listed in Table 105 are enforceable requirements.

**Table 105: Pollutant Controls:**

Control Equipment Unit No.	Control Description	Pollutant being controlled	*Control for Unit Number(s) in Table 104	Required for BACT
AGI1 and AGI2 <sup>1</sup>	Still Vent to Acid gas injection wells 100% Capture	VOC, CO2e, and H2S	Amine	Yes – CO2e and VOC No – H2S
Amine flash tank	Flash Tank emissions recycle to inlet 100% Capture	VOC, CO2e, and H2S	Amine	Yes – CO2e and VOC No – H2S
FL2	Still Vent to Acid gas flare; 100% Capture, 98% DRE <sup>2</sup>	VOC, CO2e, and H2S	Amine	Yes – CO2e and VOC No – H2S

<b>Control Equipment Unit No.</b>	<b>Control Description</b>	<b>Pollutant being controlled</b>	<b>*Control for Unit Number(s) in Table 104</b>	<b>Required for BACT</b>
C1-E to C13-E	Lean Burn Technology, AFR <sup>3</sup> Controller, GCP <sup>4</sup>	NO <sub>x</sub>	C1-E to C13-E	Yes
C1-E to C13-E	Oxidation catalyst and GCP	CO, VOC, Formaldehyde	C1-E to C13-E	Yes – CO and VOC No - Formaldehyde
C1-E to C13-E	Pipeline quality natural gas <sup>5</sup>	Sox	C1-E to C13-E	Yes
C1-E to C13-E	GCP and pipeline quality natural gas	PM <sub>10</sub> , PM <sub>2.5</sub> , CO <sub>2e</sub>	C1-E to C13-E	Yes
FL1	Facility-wide to combust venting and blowdown for maintenance; FUG (portion) 100% Capture, 98% DRE	VOC, CO <sub>2e</sub> , and H <sub>2</sub> S	Compressor and piping blowdown/venting; FUG (portion)	Yes – CO <sub>2e</sub> and VOC No – H <sub>2</sub> S
Dehy and VCD1	Flash Tank emissions route to low pressure inlet, still vent to BTEX condenser, BTEX condenser to VCD1 100% Capture, 98% DRE	VOC, HAPs, and CO <sub>2e</sub>	Dehy	Yes – VOC and CO <sub>2e</sub> No - HAPs
FL1 and FL2	GCP, pipeline quality natural gas for pilot, limitations on flaring events	NO <sub>x</sub> , CO, PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub>	FL1 and FL2	Yes
FL1 and FL2	GCP, limitations on flaring events, 40 CFR 60.18	VOC and CO <sub>2e</sub>	FL1 and FL2	Yes
FUG	LDAR (leak detection and repair)	VOC and CO <sub>2e</sub>	FUG	Yes
H4 and H5	Ultra-low NO <sub>x</sub> burners and GCP	NO <sub>x</sub>	H4 and H5	Yes
H1, H2, H3, and H6	Low NO <sub>x</sub> burners and GCP	NO <sub>x</sub>	H1, H2, H3, and H6	Yes
H1 – H6	GCP	CO, VOC	H1 to H6	Yes
H1 – H6	Pipeline quality natural gas	SO <sub>x</sub>	H1 to H6	Yes
H1 – H6	GCP and pipeline quality natural gas	PM <sub>10</sub> , PM <sub>2.5</sub> , CO <sub>2e</sub>	H1 to H6	Yes
HAUL	25 mph speed limit with speed humps <sup>6</sup>	TSP, PM <sub>10</sub> , PM <sub>2.5</sub>	HAUL	Yes – PM <sub>10</sub> , PM <sub>2.5</sub> No - TSP
L1 and VCD1	Submerged loading and vented to VCD1 100% Capture, 98% DRE	VOC and CO <sub>2e</sub>	L1	Yes

Control Equipment Unit No.	Control Description	Pollutant being controlled	*Control for Unit Number(s) in Table 104	Required for BACT
TK-1, TK-2, TK-C, TK-G, TK-H, and VCD1	Fixed roof tank with blanket gas; submerged fill pipe; vented to VCD1 100% Capture, 98% DRE	VOC and CO <sub>2</sub> e	TK-1, TK-2, TK-C, TK-G, TK-H	Yes
H2	Condensate flash emissions stabilized with heater H2 and flash emissions routed to inlet 100% Capture	VOC and CO <sub>2</sub> e	TK-1 and TK-2	Yes
Fuel	GCP and 40 CFR 60.482-10a(c)	NO <sub>x</sub> , CO, and VOC	VCD1	Yes
Fuel	GCP and pipeline quality natural gas	CO <sub>2</sub> e	VCD1	Yes

\* Unit numbers are in alphabetical order.

1. AGI means acid gas injection well.
2. DRE means destruction rate efficiency.
3. AFR means integrated air fuel ratio controller.
4. GCP means good combustion practices.
5. Pipeline quality natural gas = natural gas with no more than 5 gr total Sulfur/100 dscf and after processing through the inlet separator, amine unit, and TEG dehydrator to remove impurities.
6. Permittee shall be allowed to implement a better or equivalent control method. Better or equivalent controls include surfactants or paving.

**A106 Facility: Allowable Emissions**

- A. The following Section lists the emission units and their allowable emission limits, not including emission limits in Section A107. (40 CFR 50; 40 CFR 60, Subparts A, Dc, JJJJ, and OOOO; 40 CFR 63, Subparts A and ZZZZ; 20.2.37 NMAC; 20.2.72.210.A and B.1 NMAC; and 20.2.74 NMAC).

**Table 106.A: Allowable PPH and TPY Emissions. Refer to Tables 106.B and 107.A for additional unit specific BACT Emission Limits.**

Unit No.	NO <sub>x</sub> <sup>1</sup> pph	NO <sub>x</sub> <sup>1</sup> tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO <sub>2</sub> pph	SO <sub>2</sub> tpy	TSP pph	TSP tpy	PM <sub>10</sub> pph	PM <sub>10</sub> tpy	PM <sub>2.5</sub> pph	PM <sub>2.5</sub> tpy
Amine <sup>3</sup>	- <sup>2</sup>	-	-	-	0.0	0.0	-	-	-	-	-	-	-	-
C1-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
C2-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
C3-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
C4-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4

Unit No.	NO <sub>x</sub> <sup>1</sup> pph	NO <sub>x</sub> <sup>1</sup> tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO <sub>2</sub> pph	SO <sub>2</sub> tpy	TSP pph	TSP tpy	PM <sub>10</sub> pph	PM <sub>10</sub> tpy	PM <sub>2.5</sub> pph	PM <sub>2.5</sub> tpy
C5-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
C6-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
C7-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
C8-E	5.2	22.9	0.5	2.4	2.0	8.9	0.5	2.0	0.3	1.4	0.3	1.4	0.3	1.4
C9-E	2.6	11.4	0.9	4.0	1.6	6.9	0.2	1.0	0.2	0.7	0.2	0.7	0.2	0.7
C10-E	2.6	11.4	0.9	4.0	1.6	6.9	0.2	1.0	0.2	0.7	0.2	0.7	0.2	0.7
C11-E	2.6	11.4	0.9	4.0	1.6	6.9	0.2	1.0	0.2	0.7	0.2	0.7	0.2	0.7
C12-E	2.6	11.4	0.9	4.0	1.6	6.9	0.2	1.0	0.2	0.7	0.2	0.7	0.2	0.7
C13-E	2.6	11.4	0.9	4.0	1.6	6.9	0.2	1.0	0.2	0.7	0.2	0.7	0.2	0.7
Dehy <sup>3</sup>	-	-	-	-	0.0	0.0	-	-	-	-	-	-	-	-
FUG	-	-	-	-	* <sup>4</sup>	28.2	-	-	-	-	-	-	-	-
H1	1.3	5.6	2.1	9.4	0.1	0.6	0.4	1.6	0.2	0.9	0.2	0.9	0.2	0.9
H2	0.3	1.5	0.6	2.5	0.04	0.2	0.1	0.4	0.05	0.2	0.05	0.2	0.05	0.2
H3	0.4	1.7	0.7	2.9	0.04	0.2	0.1	0.5	0.06	0.3	0.06	0.3	0.06	0.3
H4	6.8	30.0	4.7	20.5	0.6	2.7	1.6	7.2	0.9	3.7	0.9	3.7	0.9	3.7
H5	6.8	30.0	4.7	20.5	0.6	2.7	1.6	7.2	0.9	3.7	0.9	3.7	0.9	3.7
H6	0.2	0.6	0.3	1.1	0.02	0.07	0.04	0.2	0.02	0.1	0.02	0.1	0.02	0.1
HAUL	-	-	-	-	-	-	-	-	0.4	1.6	0.1	0.5	0.01	0.04
L1 <sup>3</sup>	-	-	-	-	0.0	0.0	-	-	-	-	-	-	-	-
VCD1	0.2	1.1	0.2	0.9	1.8	7.7	-	-	-	-	-	-	-	-
TK1 <sup>3</sup> , TK2, TK-C, TK-G, TK-H	-	-	-	-	* <sup>4</sup>	0.0	-	-	-	-	-	-	-	-

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>.

2 “-” indicates the application represented emissions of this pollutant are not expected.

3 Amine unit, Dehydrator, L1, and Tank emissions are controlled 100%.

4 \* indicates that pph emission limits are not appropriate for this unit.

Note: 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.

**Table 106.B: BACT Emission Limits**

Unit No.	NO <sub>x</sub> <sup>1</sup> g/bhp-hr	CO g/bhp-hr	VOC g/bhp-hr	SO <sub>2</sub> <sup>2</sup>	PM <sub>10</sub> lb/MMBtu	PM <sub>2.5</sub> lb/MMBtu	CO <sub>2</sub> e tpy
C1-E	0.5	0.05	0.2	P <sup>2</sup>	0.00999	0.00999	16,029
C2-E	0.5	0.05	0.2	P	0.00999	0.00999	16,029
C3-E	0.5	0.05	0.2	P	0.00999	0.00999	16,029
C4-E	0.5	0.05	0.2	P	0.00999	0.00999	16,029
C5-E	0.5	0.05	0.2	P	0.00999	0.00999	16,029
C6-E	0.5	0.05	0.2	P	0.00999	0.00999	16,029
C7-E	0.5	0.05	0.2	P	0.00999	0.00999	16,029
C8-E	0.5	0.05	0.2	P	0.00999	0.00999	16,029
C9-E	0.5	0.175	0.3	P	0.00999	0.00999	10,101
C10-E	0.5	0.175	0.3	P	0.00999	0.00999	10,101
C11-E	0.5	0.175	0.3	P	0.00999	0.00999	10,101
C12-E	0.5	0.175	0.3	P	0.00999	0.00999	10,101
C13-E	0.5	0.175	0.3	P	0.00999	0.00999	10,101

**Table 106.B: BACT Emission Limits**

Unit No.	NO <sub>x</sub> lb/MMBtu	CO lb/MMBtu	VOC lb/MMBtu	SO <sub>2</sub> <sup>2</sup>	PM <sub>10</sub> lb/MMBtu	PM <sub>2.5</sub> lb/MMBtu	CO <sub>2</sub> e lb/MMBtu
H1	0.049	0.082	0.0054	P	0.0075	0.0075	117
H2	0.049	0.082	0.0054	P	0.0075	0.0075	117
H3	0.049	0.082	0.0054	P	0.0075	0.0075	117
H4	0.06	0.041	0.0054	P	0.0075	0.0075	117
H5	0.06	0.041	0.0054	P	0.0075	0.0075	117
H6	0.049	0.082	0.0054	P	0.0075	0.0075	117
VCD1	0.098	0.082	0.21	P	- <sup>3</sup>	-	117

1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub> and g/bhp-hr stands for grams per brake horsepower hour.

- 2 Pipeline (P) quality natural gas defined as: 5 grains of total sulfur/100 dscf of natural gas and after processing through the inlet separator, amine unit, and TEG dehydrator to remove impurities. Applies to all combustion units (C1-E to C13-E; H1 to H6; FL1 and FL2 pilot and purge gas; and the VCD1).
- 3 “-” indicates no unit/pollutant specific BACT emission limit applies.

B. Units H4 and H5 (heaters), nitrogen oxide (expressed as NO<sub>2</sub>) emissions shall not exceed 0.10 lbs/MMBtu according to the natural gas low heat release rate standard in 40 CFR 60, Subpart Db (60.44b).

C. Units C1-E to C13-E (RICE engines):

1. Nitrogen oxides (NO<sub>x</sub>) emissions shall not exceed 1.0 g/hp-hr (or 82 ppmvd at 15 percent oxygen) in 40 CFR 60, Subpart JJJJ, Table 1.

2. Carbon monoxide (CO) emissions shall not exceed 2.0 g/hp-hr (or 270 ppmvd at 15 percent oxygen) in 40 CFR 60, Subpart JJJJ, Table 1.

3. Volatile organic compound (VOC) emissions shall not exceed 0.7 g/hp-hr (or 60 ppmvd at 15 percent oxygen) in 40 CFR 60, Subpart JJJJ, Table 1.

D. Unit FUG, including all equipment, except compressors, within a process unit shall not exceed volatile organic compound (VOC) equipment leak detection standards (500 ppm) according to 40 CFR 60, Subpart OOOO (60.5400).

E. Units C1-E to C13-E (RICE engines) are subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart ZZZZ emission standards at 40 CFR 63.6600(b), Tables 2a and 2b.

#### **A107 Facility: Allowable Startup, Shutdown, & Maintenance (SSM), and Pilot and Purge**

- A. The maximum allowable emissions limits due to routine and predictable startup, shutdown, and/or maintenance (SSM), and pilot and purge flare emissions for this facility are listed in [Table 107.A](#) and were relied upon by the Department to determine compliance with applicable regulations. The allowable limits for FL2 in [Table 107.A](#) include compressor and associated piping blowdowns during Routine and Predictable Startup, Shutdown, and/or Maintenance (SSM).

**Table 107.A: Allowable SSM Emission Limits and Pilot and Purge Emission Limits**

Unit No.	NO <sub>x</sub> <sup>1</sup> pph BACT <sup>2</sup>	NO <sub>x</sub> <sup>1</sup> tpy	CO pph BACT	CO tpy	VOC pph BACT	VOC tpy	SO <sub>2</sub> pph BACT	SO <sub>2</sub> tpy	H <sub>2</sub> S pph	H <sub>2</sub> S tpy	CO <sub>2</sub> e tpy BACT <sup>2</sup>
FL1 <sup>3</sup>	695.2	4.2	3782.5	22.5	2558.4	10.3	13,023.6	52.1	141.6	0.6	5626.0 for SSM
											1331.0 for pilot and purge
FL2 <sup>3</sup>	101.6	1.6	552.7	8.5	7.8	0.12	5427.4	10.9	59.0	0.1	69.0 for SSM
											1331.0 for pilot and purge

- 1 Nitrogen dioxide emissions include all oxides of nitrogen expressed as NO<sub>2</sub>.
- 2 Pound per hour limits for NO<sub>x</sub>, CO, VOC, and SO<sub>x</sub> and the ton per year limit for CO<sub>2</sub>e are PSD BACT limits.
- 3 Allowable SSM emission limits for all pollutants include pilot and purge emissions, except for CO<sub>2</sub>e which has separate emission limits for SSM and pilot and purge.

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 Emissions (FL1 and FL2)

<p><b>Requirement:</b> The permittee shall perform an extended gas analysis on each flare gas stream (FL1 and FL2), quarterly and complete the following recordkeeping to demonstrate compliance with routine and predictable startup, shutdown, and maintenance (SSM) emission limits in Table 107.A.</p>
<p><b>Monitoring:</b></p> <p>(1) The permittee shall monitor the permitted routine and predictable startups and shutdowns and scheduled maintenance events.</p> <p>(2) A gas flowmeter and flow totalizer, equipped with a chart recorder or data logger (electronic storage), shall be installed in each flare line to measure and record the total standard cubic feet (scf) of gas sent to each flare during each hour and each month.</p> <p>(3) The permittee shall measure the H<sub>2</sub>S content, the total sulfur content, the VOC content, the CH<sub>4</sub> content, the CO<sub>2</sub> content, and the heating value (Btu/scf) of the gas sent to each flare for combustion. H<sub>2</sub>S shall be measured at least quarterly as part of a quarterly extended gas analysis for each gas stream (FL1 and FL2). The total sulfur content, VOC content, CH<sub>4</sub>, CO<sub>2</sub>, and heating value (Btu/scf) of the natural gas sent to each flare shall be measured at least quarterly with an extended gas analysis on the flared sour gas (FL2), and flared residue and inlet streams (FL1).</p>

(4) The flow meter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.

**Recordkeeping:**

(1) The following records shall be kept:

- quarterly extended gas analyses that shall also include H<sub>2</sub>S
- hourly and monthly flowmeter and flow totalizer measurements of gas sent to each flare (FL1 and FL2)

(2) Each month, the permittee shall use the most recent required sampling to record and summarize in a table format the following information for gas sent to each flare:

- H<sub>2</sub>S and the total sulfur content
- percent VOC, CH<sub>4</sub>, and CO<sub>2</sub> content
- gas heating value (Btu/scf)
- the hourly gas flow rates (scf/hr)
- the hourly gas flow rate (scf/hr) for any hours that exceeded any pph emission limit during the month
- the total month's scf of gas sent to each flare
- during the first 12-months of monitoring, the cumulative total of gas sent to each flare (scf/yr)
- after the first 12-months of monitoring, the monthly rolling 12-month total of gas sent to each flare (scf/yr)

(3) Each month, the permittee shall record all routine and predictable startups, shutdowns, and scheduled maintenance events, for each flare (FL1 and FL2), and shall also meet the recordkeeping requirements in General Condition B109 of this permit, except the requirement to record the start and end times of SSM events shall not apply.

(4) Records of flowmeter, totalizer, calibrations, breakdowns, reasons for breakdown, and corrective actions taken shall be maintained.

(5) Each month to demonstrate compliance with emission limits in Table 107.A, the permittee shall calculate and summarize the pph emission rates, any pph emission rate exceeding the permitted limits, and the ton per year emission rates of NO<sub>x</sub>, CO, VOC, SO<sub>2</sub>, H<sub>2</sub>S, and CO<sub>2</sub>e using the following information for gas sent to each flare (FL1 and FL2):

- the H<sub>2</sub>S content, total sulfur content, VOC content, CH<sub>4</sub>, CO<sub>2</sub>, and the gas heating value (MMBtu/scf) from the most recent H<sub>2</sub>S measurements and gas analyses
- the emission factors used to calculate NO<sub>x</sub>, CO, and CO<sub>2</sub>e
- the maximum hourly gas flow rate (scf/hr)
- the hourly gas flow rate (scf/hr) for any hours that exceeded any pph emission limit during the month
- during the first 12 months of monitoring, the cumulative total of gas sent to each flare
- after the first 12-months of monitoring, the monthly rolling 12-month total of gas sent to each flare (scf/yr)

(6) The permittee shall also maintain all raw data in accordance with Section B110.
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<b>Reporting:</b> The permittee shall report in accordance with Section B110.
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D. Pilot and Purge Emissions for CO<sub>2</sub>e (FL1 and FL2)

<b>Requirement:</b> The permittee shall demonstrate compliance with the 1331.0 tpy BACT limit for CO <sub>2</sub> e (Table 107.A) by measuring and limiting the pilot and purge gas flow rates to: 20.2 MMscf/yr per flare.
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<b>Monitoring:</b>
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(1) A gas flowmeter and flow totalizer, equipped with a chart recorder or data logger (electronic storage), shall be installed in each flare line (FL1 and FL2) to measure and record the total standard cubic feet (scf) of pilot and purge gas sent to each flare during each month.
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(2) The chart recorder or data logger, flowmeter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.
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<b>Recordkeeping:</b>
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(1) The following records shall be kept:
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- |  |
|--|
| <ul style="list-style-type: none"> <li>• The monthly total volume (scf) from flowmeter and flow totalizer measurements of pilot and purge gas sent to each flare (FL1 and FL2)</li> <li>• during the first 12-months of monitoring, the cumulative total of pilot and purge gas sent to each flare (scf/yr)</li> <li>• after the first 12-months of monitoring, the monthly rolling 12-month total of pilot and purge gas sent to each flare (scf/yr)</li> </ul> |
|--|

(2) Records of flowmeter, totalizer, calibrations, breakdowns, reasons for breakdown, and corrective actions taken shall be maintained as per Condition A107.C and shall also be applied to this condition.
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<b>Reporting:</b> The permittee shall report in accordance with Section B110.
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**A108 Facility: Allowable Operations**

A. This facility is authorized for continuous operation. No monitoring, recordkeeping, and reporting are required to demonstrate compliance with continuous hours of operation.

B. **Coordination of startup of this facility (Zia II Gas Plant) and the closure of the Lusk Booster Station.** DCP's Zia II Gas Plant will replace DCP's existing Lusk Booster Station, as permitted in NSR Permit No. 355-M6. To demonstrate compliance with state and federal ambient air quality standards, DCP's Lusk Booster Station shall cease operations within 60 days of startup (as defined at C101.Q) of any regulated combustion unit listed in Table 104 at DCP's Zia II Gas Plant. Within 15 days, the permittee shall submit to the Compliance and Enforcement Section Manager, the startup date and unit number(s) of the regulated unit(s) at DCP's Zia II Gas Plant and the date that the Lusk Booster station ceased

operations. Within 120 days of startup of any regulated unit at DCP’s Zia II Gas Plant, DCP shall submit to the Permit Section Program Manager a request to cancel the Lusk Booster Station Title V permit (20.2.70.400.I NMAC). The cancellation of the Lusk Booster Station Title V permit will become effective upon receipt by the Department.

**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 - Pipeline Quality Natural Gas**

- A. Fuel and Fuel Sulfur Requirements: Units C1-E to C13-E, H1 to H6, VCD1, and the pilot/purge/supplemental fuel for Flares (FL1 and FL2)

<p><b>Requirement:</b></p> <p>(1) To demonstrate compliance with the PM2.5, PM10, SO2, and CO2e pph, tpy, and BACT emission limits in Tables 106.A, 106.B, and 107.A, all listed combustion emission units shall combust only pipeline quality natural gas containing no more than 5.0 grains of total sulfur per 100 dry standard cubic feet.</p> <p>(2) For the purposes of this permit, pipeline quality natural gas is defined as having no more than 5 gr total sulfur/100 dscf and processed through the inlet separator, amine unit, and TEG dehydrator to remove impurities (or equivalent if fuel gas is received from outside the plant). If fuel gas is received from outside the facility the permittee shall maintain records of a current, valid purchase contract, tariff sheet or transportation contract for the fuel gas purchased, including fuel gas analysis specifying the fuel meets the defined sulfur content and processing requirements.</p>
<p><b>Monitoring:</b> Compliance is demonstrated through recordkeeping.</p>
<p><b>Recordkeeping:</b> The permittee shall demonstrate compliance with the pipeline quality natural gas limit on total sulfur content by maintaining records of fuel gas analyses, specifying the total sulfur content. The analyses shall not be older than six months or if purchased, a valid purchase contract not older than one year.</p>
<p><b>Reporting:</b> The permittee shall report in accordance with Section B110.</p>

**A111 Facility: 20.2.37 NMAC Particulate Matter**

- A. 20.2.37 NMAC Particulate Matter: Entire Facility

<p><b>Requirement:</b> The entire facility is subject to 20.2.37 NMAC. Pursuant to 20.2.37.202.A NMAC, particulate emissions from fuel burning equipment shall not exceed 0.05 gr/dscf of exit gas. The permittee shall demonstrate compliance with 20.2.37.202.A NMAC through the use of pipeline quality natural gas as defined at A110.A.</p>
<p><b>Monitoring:</b> The permittee shall meet the monitoring in Condition A110.A.</p>

<b>Recordkeeping:</b> The permittee shall recordkeeping requirements in Condition A110.A.
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<b>Reporting:</b> The permittee shall report according to Section B110.
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### **A112 Facility: Haul Roads**

#### A. Haul Road Control (Unit HAUL)

<b>Requirements:</b>
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(1) To demonstrate compliance with the TSP, PM10, and PM2.5 (pph and tpy) emission limits in Table 106.A and the BACT control requirements in Table 105 for the haul road, truck traffic going in and out of the plant site shall be limited to a speed limit of 25 mph. The speed limit signs shall be placed so that the speed limit is visible from both directions of traffic.
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(2) 25 mph rated speed humps shall be installed and maintained at an interval of approximately 100 ft. This condition will facilitate keeping speeds down to 25 mph.
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These control measures shall be used on roads as far as the nearest public road. The permittee shall be allowed to implement equivalent or more stringent control measures. Equivalent or more stringent control measures include use of surfactants and paving.
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<b>Monitoring:</b> The permittee shall inspect the condition of speed humps at least every 12 months if paved, or monthly if not paved.
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<b>Recordkeeping:</b> The permittee shall record the dates of inspections, speed hump condition, and any maintenance required and conducted on the speed humps.
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<b>Reporting:</b> The permittee shall report in accordance with Section B110.
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## **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 and Compressors**

A. Initial Compliance Tests NO<sub>x</sub>, CO, PM10, and PM2.5 (Units C1-E through C13-E)

<b>Requirement:</b> The permittee shall demonstrate compliance with the allowable NO <sub>x</sub> , CO, VOC, PM10, and PM2.5 (pph and tpy) emission limits in Table 106.A and the BACT limits in Table 106.B by completing the following initial compliance testing on engines C1-E to C13-E.
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(1) EPA Reference Method Tests for NO <sub>x</sub> and CO, listed in Condition B111.B, shall be completed on each engine.
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(2) Compliance with the CO emission limits shall be deemed to demonstrate compliance with the VOC emission limits.
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(3) EPA Reference Method Tests for TSP and condensable particulate matter (CPM) listed in Condition B111.B shall be completed on at least 3 of Units C1-E to C8-E and on at least 3 of Units C9-E to C13-E.

(4) Test results for filterable TSP and CPM shall be combined to verify compliance with allowable TSP, PM10, and PM2.5 emission limits in Table 106.A and with the PM10 and PM2.5 BACT limits in Table 106.B.

(5) The tests required for TSP and CPM shall be extended to 2-hour test runs to ensure accurate samples are obtained.

(6) Tests shall be completed in accordance with Section B111 of this permit, including the timeframe(s) according to B111.A(2).

**Monitoring:** The permittee shall monitor all parameters necessary to meet the recordkeeping requirements of this condition.

**Recordkeeping:**

(1) During each NOx and CO test run, records shall include at a minimum the following information measured during the test, the operating horsepower (hp) during testing, the lb/hr emission rate, the g/hp-hr emission rate, and all parameters used to calculate emission rates.

(2) During each TSP and CPM test run, records shall include at a minimum the following information measured during the test run, the operating horsepower (hp) during testing, the lb/hr emission rate, the fuel heat value (Btu/scf), the fuel consumption (scf/hr), the lb per fuel heat rate (lb/MMBtu), and all parameters used to calculate the emission rates.

(3) The permittee shall use the most current gas analysis to determine the fuel heat value (Btu/scf) and measure the actual fuel flow rate to that engine during the test.

(4) All calculations used to determine emission rates shall be included with the test records.

(5) The permittee shall maintain records in accordance with the applicable Sections in B109, B110, and B111.

**Reporting:**

(1) The test report shall summarize the records required by this condition.

(2) The permittee shall report in accordance with the applicable Sections in B109, B110, and B111.

**B. Periodic Testing NOx and CO (Units C1-E through C13-E)**

**Requirement:** The permittee shall demonstrate compliance with the allowable NOx, CO, and VOC emission limits in Table 106.A and the BACT limit in Table 106.B by completing the following periodic stack testing on engines C1-E to C13-E.

**Monitoring:** The permittee shall test for NOx and CO using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. Testing 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.

(1) The monitoring period shall be quarterly. The quarterly monitoring period shall be defined as: January 1 to March 31; April 1 to June 30; July 1 to September 30; and October 1 to

December 31.

(2) The first test shall occur within the first monitoring period occurring after initial testing required in A201.A.

(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.

(6) The permittee shall monitor all parameters necessary to meet the recordkeeping requirements of this condition.

**Recordkeeping:**

(1) During each NO<sub>x</sub> and CO test run, records shall include at a minimum the following information measured during the test, the operating horsepower (hp) during the testing, the lb/hr emission rate, the g/hp-hr emission rate, and all parameters used to calculate emission rates.

(2) All calculations used to determine emission rates shall be included with the test records.

(3) All records of portable analyzer calibrations and certifications of calibration gases.

(4) The permittee shall maintain records in accordance with Sections B109, B110, and B111.

**Reporting:**

(1) The test report shall summarize the records required by this condition.

(2) The permittee shall report in accordance with Sections B109, B110, and B111.

C. Fuel Flow Monitoring CO<sub>2</sub>e (Units C1-E through C13-E)

**Requirement:** The permittee shall demonstrate compliance with the allowable CO<sub>2</sub>e BACT limits in Table 106.B by completing fuel flow monitoring and calculations for engines C1-E to C13-E.

**Monitoring:**

(1) To measure the monthly fuel consumption (scf/month) to each engine, a gas flowmeter and flow totalizer, equipped with a chart recorder or data logger (electronic storage) capable of recording hourly flow volumes, shall be installed in the fuel line to each engine.

(2) The flow meter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.

**Recordkeeping:**

The following records shall be kept:

(1) the monthly flowmeter and flow totalizer measurements of fuel gas sent to each engine

(2) the fuel heating value (Btu/scf), CH<sub>4</sub>, and CO<sub>2</sub> content of the natural gas sent to each engine obtained from the gas analyses required in A110.A

(3) the calculations used to determine the monthly CO<sub>2</sub>e emissions using the methods in 40 CFR 98, Subpart C

(4) during the first 12 months of monitoring, the cumulative ton per year (tpy) CO<sub>2</sub>e emissions for each engine

(5) after the first 12-months of monitoring, the monthly rolling 12-month total of CO<sub>2</sub>e tpy

emissions for each engine

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

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

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

D. Maintenance, Repair, and Good Combustion Practices (GCP) (Units C1-E through C13-E)

**Requirement:** To demonstrate compliance with the BACT limits in Table 106.B, the permittee shall meet the following Good Combustion Practices (GCPs).

(1) Each engine shall be a “new” engine based on engine technical data sheets provided in the permit application to the Department (engines shall be manufactured after August 9, 2011) and manufactured with an integrated air-fuel ratio controller (AFR) and ultra-lean burn and low NOx technology.

(2) The permittee shall operate each engine at the combustion temperature recommended by the manufacturer.

(3) Each engine shall be maintained and tuned at least once per 12-months, or more frequently if recommended by the manufacturer.

(4) If requested by the Department, the permittee shall submit the manufacturer’s engine specifications and recommended maintenance and tune up requirements along with a written site specific inspection and maintenance protocol to the Permit Section Manager within **3 months** of facility start up. The Department shall notify the permittee of any disapproved or approved protocol, or portions thereof, and shall require protocol revisions and resubmittal of any disapproved sections within 60 days.

(5) While waiting for approval from the Department, the permittee shall implement the proposed site specific inspection and maintenance protocol within the time lines specified in Condition B108.G.

(6) To ensure on-going good combustion practice of the units, the permittee shall update the approved inspection and maintenance protocol as needed based on operational experience with the units.

**Monitoring:** The permittee shall complete the following monitoring according to the inspection and maintenance protocol:

(1) inspect the air to fuel ratio, oxygen range, and temperature at the frequency specified by the approved protocol and updates to that protocol

(2) complete additional monitoring according to the approved protocol and updates to that protocol.

**Recordkeeping:**

(1) The permittee shall maintain a copy of the manufacturer’s engine specifications and recommended maintenance and tune-up requirements along with a written site specific inspection and maintenance protocol approved by the Department. The permittee shall also maintain a copy of the approval from the Department.

(2) The permittee shall maintain records of the dates and the results of inspections of the air to

fuel ratio, oxygen range, and temperature; and the tune ups and maintenance. (3) The permittee shall maintain records in accordance with Section B109.
<b>Reporting:</b> The permittee shall report in accordance with Section B110.

E. Oxidation Catalyst Operation (Units C1-E through C13-E)

<b>Requirement:</b> To demonstrate compliance with the CO and VOC emission limits in Table 106.A and 106.B, and meet the requirements of NSPS JJJJ and NESHAP ZZZZ, the permittee shall meet the following control requirements.
(1) The units C1-E through C13-E shall be equipped and operated with an oxidation catalyst to control CO, VOC, and HAP emissions.
(2) The permittee shall maintain the oxidation catalysts according to manufacturer’s or supplier’s recommended maintenance, including replacement of oxygen sensor as necessary for oxygen-based controllers.
<b>Monitoring:</b> The engines shall be operated with the oxidation catalysts at all times of operation, including during 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.
<b>Recordkeeping:</b>
(1) The permittee shall maintain records of the manufacturer’s or supplier’s recommended maintenance, catalyst specifications, actions taken during periods of catalyst maintenance, and of the maintenance performed.
(2) The permittee shall maintain records in accordance with Section B109.
<b>Reporting:</b> The permittee shall report in accordance with Section B110.

F. 40 CFR 60, Subpart JJJJ (Units C1-E through C13-E)

<b>Requirement:</b> The units will be subject to 40 CFR 60, Subparts A and JJJJ and the permittee shall comply with the notification requirements in Subpart A and the specific requirements of Subpart JJJJ.
<b>Monitoring:</b> The permittee shall comply with all applicable monitoring and testing requirements in 40 CFR 60, Subpart A and Subpart JJJJ, including but not limited to 60.4243.
<b>Recordkeeping:</b> 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.
<b>Reporting:</b> 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 and Section B110 of this permit.

G. 40 CFR 63, Subpart ZZZZ (Units C1-E through C13-E)

<b>Requirement:</b> The units will be subject to 40 CFR 63, Subparts A and ZZZZ and the permittee shall comply with any applicable notification requirements in Subpart A and any applicable requirements of Subpart ZZZZ.
<b>Monitoring:</b> The permittee shall comply with all applicable monitoring and testing 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, and Section B110.

H. 40 CFR 60, Subpart OOOO (Units C1-C through C13-C )

**Requirement:** The units will be subject to 40 CFR 60, Subparts A and OOOO in accordance the applicability date in 40 CFR 60.5365 and the permittee shall comply with the notification requirements in Subpart A and the applicable requirements of Subpart OOOO, including standards in 60.5385.

**Monitoring:** The permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart OOOO, including but not limited to 60.5410 and 60.5415.

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

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

**A202 Glycol Dehydrators**

A. Control Device Inspection (Unit Dehy)

**Requirement:** To demonstrate compliance with the allowable VOC emission limits in Table 106.A and the BACT control requirements in Table 105, the permittee shall meet the following control requirements for Unit Dehy.

- (1) The flash tank vent shall be routed at all times to a process point that allows the off-gas to be recycled to the low pressure inlet stream and recompressed.
- (2) The still vent emissions shall be routed at all times to the condenser (BTEX condenser).
- (3) The TEG regenerator, flash tank, and condenser system shall be a closed vent system and be designed and operated so that no gases are vented or emitted directly to the atmosphere.
- (4) Non-condensables from the BTEX condenser shall be sent to the vapor combustion device (Unit VCD1) for destruction. The VCD1 shall be installed, operated, and maintained according to manufacturer's specifications and shall have a 98% or greater destruction rate efficiency (DRE) (monitoring according to Condition A211).

**Monitoring:** The permittee shall inspect the glycol dehydrator and the control equipment semi-annually to ensure all equipment components are operating as initially designed and in accordance with the manufacturer's recommended procedures.

**Recordkeeping:** The permittee shall record 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 maintenance recommendations.

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

B. 40 CFR 63, Subpart HH (Unit Dehy)

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

**A203 Tanks and Truck Loading**

A. Tank Operation (Units TK1, TK2, TK-C, TK-G, and TK-H)

<p><b>Requirement:</b> To demonstrate compliance with the allowable VOC emission limits and BACT control requirements in Table 105, the permittee shall meet the following requirements for the tanks.</p> <p>(1) The condensate tank and produced water tank vents shall be routed at all times to the vapor combustion device (VCD1).</p> <p>(2) There shall be no flash emissions from the condensate tanks TK1 and TK2. Flashing emissions shall be captured and managed prior to reaching the condensate tanks. Emissions shall be routed back to the low pressure inlet to prevent flashing emissions to the atmosphere.</p> <p>(3) All of these tanks shall have fixed roofs with blanket gas and be filled through a submerged fill pipe.</p>
<p><b>Monitoring:</b> The permittee shall conduct the following monitoring on a semi-annual basis:</p> <p>(1) inspect the closed vent system to the flash gas stabilizer equipment to ensure that it is capturing all flash emissions prior to reaching the condensate tanks,</p> <p>(2) inspect each condensate tank and water tank vent and the closed vent system to ensure proper routing to the VCD1, and</p> <p>(3) inspect each tank, the VCD1, and associated piping for corrosion and gas leaks.</p> <p>(4) Although the tanks are not subject to NSPS OOOO, the leak detection monitoring required by 40 CFR 60, Subpart OOOO may be used to satisfy monitoring of the closed vent system for corrosion and gas leaks if they meet or exceed the requirements of this condition.</p>
<p><b>Recordkeeping:</b></p> <p>(1) The permittee shall maintain records of the tanks to include the following:</p> <ul style="list-style-type: none"> <li>a) Tank capacity</li> <li>b) Material stored</li> <li>c) Fill pipe design</li> </ul> <p>(2) The permittee shall record the results of all semi-annual equipment inspections, and annual tank inspections chronologically, noting any maintenance or repairs needed to bring the condensate tanks, water tanks, and closed loop system into compliance with permit conditions.</p> <p>(3) Records shall also be maintained in accordance with Section B109.</p>

<b>Reporting:</b> The permittee shall report in accordance with Section B110.
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B. Truck Loading - Condensate Loadout (Unit L1)

<b>Requirement:</b> To demonstrate compliance with the allowable VOC (pph and tpy) emission limits in Table 106.A and the BACT control requirements in Table 105, the permittee shall meet the following control requirements:
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| <ul style="list-style-type: none"> <li>(1) Loadout to trucks shall occur through a submerged process to minimize off-gas vapors, and</li> <li>(2) a sleeve or vapor capturing device shall direct and route off-gas vapors during truck loadout to a vapor combustion device (VCD1) for destruction.</li> </ul> |
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<b>Monitoring:</b>
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| <ul style="list-style-type: none"> <li>(1) The permittee shall monitor during each condensate truck load-out to ensure that the process meets the control requirements.</li> <li>(2) Semi-annually, the permittee shall inspect the closed vent system that routes the off-gases to the VDC1.</li> </ul> |
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<b>Recordkeeping:</b>
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| <ul style="list-style-type: none"> <li>(1) The permittee shall record the dates of each loadout and maintain a checklist that verifies submerged loading and hook up to the closed vent system routing the off-gas vapors to the VDC1.</li> <li>(2) The permittee shall record the dates of and the closed vent system inspections, and any repairs needed.</li> <li>(3) Records shall also be maintained in accordance with Section B109.</li> </ul> |
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<b>Reporting:</b> The permittee shall report in accordance with Section B110.
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## A204 Heaters/Boilers

A. Maintenance, Repair, and Good Combustion Practices (GCP) (Units H1 to H6)

<b>Requirement:</b> To demonstrate compliance with allowable emission limits in Table 106.A and the BACT limits in Table 106.B, the permittee shall meet the following Good Combustion Practices (GCPs).
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| <ul style="list-style-type: none"> <li>(1) Heaters H4 and H5 shall be low heat release, natural gas fired heaters as defined in 40 CFR 60, Subpart Db. Heaters H1, H2, H3, and H6 shall also be natural gas fired.</li> <li>(2) Each heater shall meet any guaranteed emission rates as provided by the manufacturer.</li> <li>(3) The permittee shall operate each heater at the combustion air temperature and excess combustion air (%) recommended by the manufacturer.</li> <li>(4) Each heater shall be maintained and tuned at least once per 12-months, or more frequently if recommended by the manufacturer.</li> <li>(5) For approval by the Department, the permittee shall submit the manufacturer's heater specifications and recommended maintenance and tune up requirements along with a written site specific inspection and maintenance protocol to the Permit Section Manager within <b>3 months</b> of facility start up. The Department shall notify the permittee of any disapproved or approved protocol, or portions thereof, and shall require protocol revisions and resubmittal of any disapproved sections within 60 days.</li> </ul> |
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(6) While waiting for approval from the Department, the permittee shall implement the proposed site specific inspection and maintenance protocol within the time lines specified in Condition B108.G.

(7) To ensure on-going good combustion practice of the units, the permittee shall update the approved inspection and maintenance protocol as needed based on operational experience with the units.

**Monitoring:** The permittee shall complete the following monitoring according to the inspection and maintenance protocol:

(1) Monitor the combustion air temperature and excess combustion air (%) at the frequency specified by the approved protocol, or more frequently as necessary.

(2) Complete additional monitoring according to the approved protocol and updates to that protocol.

**Recordkeeping:**

(1) The permittee shall maintain a copy of the manufacturer's heater specifications and recommended maintenance and tune-up requirements along with a written site specific inspection and maintenance protocol approved by the Department. The permittee shall also maintain a copy of the approval from the Department.

(2) The permittee shall maintain records of the dates and the results of maintenance and monitoring of the combustion air temperature and excess combustion air (%).

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

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

B. Initial Compliance Test NO<sub>x</sub>, CO, and VOC (Units H4 and H5)

**Requirement:** The permittee shall demonstrate compliance with the allowable NO<sub>x</sub>, CO, and VOC emission limits in Table 106.A and the BACT limits in Table 106.B by completing the following initial compliance testing on heaters H4 and H5.

(1) EPA Reference Method Tests for NO<sub>x</sub> and CO, listed in Condition B111.B, shall be completed on each heater.

(2) Compliance with the CO emission limits shall be deemed to demonstrate compliance with the VOC emission limits.

(3) Tests shall be completed in accordance with Section B111 of this permit.

**Monitoring:** The permittee shall monitor all parameters necessary to meet the recordkeeping requirements of this condition.

**Recordkeeping:**

(1) During each NO<sub>x</sub> and CO test run, records shall include at a minimum the following information measured during the test run, the lb/hr emission rate, the fuel heat value (Btu/scf), the fuel consumption (scf/hr), the lb per fuel heat rate (lb/MMBtu), and all parameters used to calculate emission rates.

(2) The permittee shall use the most current gas analysis to determine the fuel heat value (Btu/scf) and measure the actual fuel flow rate to that heater during the test.

(3) Records shall include the stack gas temperature, the level of excess air, and the percent moisture.

<p>(4) All calculations used to determine emission rates shall be included with the test records.</p> <p>(5) The permittee shall maintain records in accordance with the applicable Sections in B109, B110, and B111.</p>
<p><b>Reporting:</b></p> <p>(1) The test report shall summarize the records required by this condition.</p> <p>(2) The permittee shall report in accordance with the applicable Sections in B109, B110, and B111.</p>

C. Fuel Flow Monitoring CO<sub>2</sub>e (Units H4 and H5)

<p><b>Requirement:</b> The permittee shall demonstrate compliance with the allowable CO<sub>2</sub>e BACT limits in Table 106.B by completing fuel flow monitoring and calculations for heaters H4 and H5.</p>
<p><b>Monitoring:</b></p> <p>(1) To measure monthly fuel consumption (scf/month) to each heater, a gas flowmeter and flow totalizer, equipped with a chart recorder or data logger (electronic storage) capable of recording hourly flow volumes, shall be installed in the fuel line to each heater.</p> <p>(2) The flow meter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.</p>
<p><b>Recordkeeping:</b></p> <p>The following records shall be kept:</p> <p>(1) The monthly flowmeter and flow totalizer measurements of fuel gas sent to each heater.</p> <p>(2) The fuel heating value (Btu/scf), CH<sub>4</sub>, and CO<sub>2</sub> content of the natural gas sent to each heater obtained from the gas analyses required in A110.A.</p> <p>(3) The calculations used to determine the monthly CO<sub>2</sub>e emissions using the methods in 40 CFR 98, Subpart C.</p> <p>(4) During the first 12 months of monitoring, the cumulative ton per year (tpy) CO<sub>2</sub>e emissions for each heater.</p> <p>(5) After the first 12-months of monitoring, the monthly rolling 12-month total of CO<sub>2</sub>e tpy emissions for each heater.</p> <p>(6) Records of flowmeter, totalizer, and inline monitor certifications, calibrations, breakdowns, reasons for the breakdown, and corrective actions taken shall be maintained.</p>
<p><b>Reporting:</b> The permittee shall report in accordance with Section B110.</p>

D. 40 CFR 60, Subpart Db (Units H4 and H5)

<p><b>Requirement:</b> The units are subject (if greater than 100 MMBtu/hr) to 40 CFR 60, Subpart Db and the permittee shall comply with the applicable requirements of 40 CFR 60, Subpart A and Subpart Db.</p>
<p><b>Monitoring:</b></p> <p>(1) The permittee shall demonstrate that the facility is exempt from the SO<sub>2</sub> standard at 60.42b(k)(2) by complying with Condition A110.</p> <p>(2) The permittee shall demonstrate the facility is exempt from the PM standard at 60.43b by complying with Condition A110.</p> <p>(3) The permittee shall comply with all applicable monitoring and testing requirements of 40</p>

CFR 60, Subpart Db, including a demonstration that the NO <sub>x</sub> standard (0.1 lb/MMBtu) at 60.44b is met.
<b>Recordkeeping:</b> The permittee shall comply with the recordkeeping requirements of 40 CFR 60.49b.
<b>Reporting:</b> The permittee shall comply with the reporting requirements of 40 CFR 60.49b, and in Section B110.

E. 40 CFR 60, Subpart Dc (Unit H1 or other TBD heater units depending on capacity)

<b>Requirement:</b> The unit(s) is 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.
<b>Monitoring:</b> (1) The permittee shall demonstrate the facility is exempt from the SO <sub>2</sub> standard at 60.42c and monitoring at 60.46c by complying with Condition A110. (2) The permittee shall demonstrate the facility is exempt from the PM standard at 60.43c and monitoring at 60.47c by complying with Condition A110.
<b>Recordkeeping:</b> The permittee shall comply with the recordkeeping requirements of 40 CFR 60.48c.
<b>Reporting:</b> The permittee shall comply with the reporting requirements of 40 CFR 60.48c, and in Section B110.

H. 40 CFR 63, Subpart DDDDD (Units H1 through H6)

<b>Requirement:</b> The units are subject to 40 CFR 63, Subpart DDDDD and the permittee shall comply with all the applicable requirements of 40 CFR 63, Subparts A and DDDDD.
<b>Monitoring:</b> The permittee shall comply with all applicable monitoring and testing requirements of 40 CFR 63, Subpart DDDDD, including 63.7540(a)(10) for Units H1, H4, and H5, and 63.7500(e), 63.7540(a)(11), and 63.7540(a)(12) for Units H2, H3, and H6.
<b>Recordkeeping:</b> The permittee shall comply with the applicable recordkeeping requirements of 40 CFR 63.7555 and 63.7560.
<b>Reporting:</b> The permittee shall comply with the applicable notification and reporting requirements of 40 CFR 63.7545 and 63.7550, and in Section B110.

**A205 Turbines – Not Required**

**A206 Flares**

A. Good Combustion Practices (GCP) (Units FL1 and FL2)

<b>Requirement:</b> To demonstrate compliance with the allowable emission limits in Table 107.A, the BACT requirements in Table 105, and the 98% destruction rate efficiency (DRE) for VOCs and CH <sub>4</sub> , the permittee shall meet the following GCPs.  (1) The permittee shall conduct operational inspections, semi-annually (two times per 12-months), to determine that the flares (FL1 and FL2) are operating properly. The permittee shall submit the manufacturer's FL1 and FL2 specifications and an inspection protocol to the Permit
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Section Manager for approval by the Department within **3 months** of facility startup. At a minimum, the protocol shall include methods for monitoring pilot flame temperature, proper residence time within the combustion area, and proper air mixing. The Department shall notify the permittee of any disapproved or approved protocol, or portions thereof, and shall require protocol revisions and resubmittal of any disapproved sections within 60 days.

(2) While waiting for approval from the Department, the permittee shall implement the proposed site specific inspection and maintenance protocol within the time lines specified in Condition B108.G.

(3) FL1 and FL2 shall meet the no visible emissions requirement at 40 CFR 60.18(c)(1), shall be operated with a flame present at all times at 40 CFR 60.18(c)(2), and shall meet the heat content and maximum tip velocity specifications at 40 CFR 60.18(c)(3).

(4) To ensure on-going good combustion practice of the units, the permittee shall update the approved inspection and maintenance protocol as needed based on operational experience with the units.

**Monitoring:** Inspections and visible emissions monitoring shall be conducted when FL1 and/or FL2 are operating.

(1) The permittee shall conduct the semi-annual inspections according to the Department approved inspection protocol.

(2) Semi-annually, the permittee shall determine the exit velocity in accordance with 40 CFR 60.18(f)(4) and flows as measured in Condition A107, and the determine the net heating value according to Condition A107.C.

(3) Semi-annually, the permittee shall verify that there are no visible emissions from Units FL1 and FL2 for more than 5 minutes in 2 consecutive hours using EPA Reference Method 22 as stated at 40 CFR 60.18(f)(1). The observation period shall be 2 hours.

**Recordkeeping:** The permittee shall keep the following records:

(1) The permittee shall maintain a copy of the manufacturer's flare specifications and the inspection protocol approved by the Department. The permittee shall also maintain a copy of the approval from the Department.

(2) The dates, parameters inspected, the results of the inspections, and any repairs or adjustments needed as a result of the inspections.

(3) The exit velocity, the net heating value, and the parameters and calculations used to determine these values.

(4) The EPA Method 22 results.

(5) The permittee shall also maintain records in accordance with Section B109.

**Reporting:** The permittee shall report according to Section B110.

B. Facility Blowdown System: Visible Emissions and 20.2.37.205.E NMAC (Units FL1 and FL2)

**Requirement:** The permittee shall not operate a blowdown system without disposing of the gases in a manner which will minimize hydrocarbon emissions to the atmosphere and the flares shall be smokeless flares. (20.2.37.205.E NMAC)

**Monitoring:** The permittee shall demonstrate compliance with the monitoring required in Condition A206.A.

<p><b>Recordkeeping:</b> The permittee shall maintain a records in accordance with Condition A206.A</p> <p><b>Reporting:</b> The permittee shall report in accordance with Section B110.</p>
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**A207 Sulfur Recovery Unit – Not Required**

**A208 Amine Unit**

A. Operating and Control Requirements (Unit Amine)

<p><b>Requirement:</b> To comply with the allowable emission limits in Table 106.A, and BACT requirements in Table 105:</p> <p>(1) All amine unit equipment components (including the amine contactor, flash tank(s), amine tanks, amine pumping system, and amine still) shall be inspected semi-annually for proper function and operation.</p> <p>(2) Flash tank emissions shall be recovered and sent to the inlet stream at all times.</p> <p>(3) Emissions from the amine still overhead vents shall be routed at all times to the acid gas injection wells (AGI wells, Units AGI1 and/or AGI2, Condition A210.A), except during periods of AGI maintenance when emissions shall be routed to the acid gas flare (Unit FL2, Condition A107.A).</p> <p>(4) At no time shall the amine unit emissions be vented directly to the atmosphere.</p>
<p><b>Monitoring:</b> Semi-annually, the permittee shall inspect all amine unit equipment components for proper operation and function and to ensure that the flash tank emissions, and amine unit still overhead vents are routed at all times to their control devices.</p>
<p><b>Recordkeeping:</b> The permittee shall maintain a record of the semi-annual inspections, any deviations from the requirements of this condition, and any necessary repairs.</p>
<p><b>Reporting:</b> The permittee shall report in accordance with Section B110.</p>

**A209 Fugitive Equipment Leak Standards**

A. Facility-wide Operations (Unit FUG) and Leak Standards (equipment leak standards for all applicable process unit equipment) FUG includes named units Amine, Dehy, FL1, FL2, L1, TK-1, TK-2, TK-C, TK-G, TK-H, and VCD1

<p><b>Requirement:</b> The permittee shall comply with the allowable emission limits in Table 106.A, BACT control requirements in Table 105, and Condition A106.D. To demonstrate compliance with these requirements, the permittee shall implement a leak detection and repair (LDAR) program. An LDAR program that meets all of the requirements of 40 CFR 60, Subpart OOOO shall be deemed in compliance with this condition.</p> <p>Unit FUG is subject to 40 CFR 60, Subparts A and OOOO according to 40 CFR 60.5365 and the permittee shall comply with the notification requirements in Subpart A and the applicable specific requirements of Subpart OOOO, including standards in 60.5400.</p>
<p><b>Monitoring:</b> The permittee shall inspect equipment in wet gas and VOC service, in accordance with the requirements at 40 CFR 60, Subpart OOOO.</p>

(1) The permittee shall place a visible tag on all components that have a liquid leak or a vapor leak greater than 500 ppm VOCs until those components are repaired.

(2) The permittee shall comply with all applicable monitoring requirements in 40 CFR 60, Subpart A and Subpart OOOO, including but not limited to 60.5410 and 60.5415.

**Recordkeeping:** The permittee shall maintain records of all leaks and shall comply with all applicable recordkeeping requirements in 40 CFR 60, Subpart A and Subpart OOOO, including but not limited to 60.5420, and according to Section B109.

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

## A210 Acid Gas Injection

### A. Acid Gas Injection Well Operation (Units AGI1 and AGI2)

**Requirement:** The permittee shall demonstrate compliance with 100% capture of CO<sub>2</sub> emissions (AGI as BACT for the Amine Unit). For SSM AGI events, the resulting acid gases shall be routed to FL2. Requirements:

(1) The permittee shall operate two Class II injection wells (permitted through the New Mexico Oil and Conservation Division (NMOCD)).

(2) These wells (AGI1 and AGI2) shall receive acid gases exiting from the Amine Unit (Condition A208.A) except as allowed by Section A107.

(3) The permittee shall meet the following requirements:

(a) Only one of the AGI wells (either AGI1 or AGI2) shall be taken offline at any time for maintenance. During such times, acid gases intended for the well out of service shall be routed to the acid gas flare (FL2) and in accordance with the allowable emission limits in Table 107.A.

(b) Total volumetric flow of acid gases exiting the Amine Unit, shall at all times be equal to the sum of acid gas volumetric flows entering AGI1, AGI2, and/or FL2:

$$\text{Amine Unit exit flow} = \text{AGI1 inlet flow} + \text{AGI2 inlet flow} + \text{FL2 inlet flow}$$

(c) The permittee shall monitor and compare the AGI compressor discharge pressure and the AGI well head pressures. The pressure at the compressor(s) discharge minus the pressure at the well heads shall be a positive number.

(d) If at any time the NMOCD requests a radio-tracer study of the permittee's AGI wells, the permittee shall notify the Department of such request made by NMOCD.

**Monitoring:**

(1) The permittee shall monitor when any AGI well goes offline, monitor the duration of time the well(s) is/are offline, and when an offline well comes back online.

(2) The permittee shall continuously monitor the flow of acid gases:

(a) from the Amine Unit

(b) into each of the wells AGI1 and AGI2

(c) to the acid gas flare (FL2)

<p>(d) during the first 12 months of monitoring, daily volumetric flows (scf/d or MMscf/d), from the Amine Unit, into each well (AGI1 and AGI2) and to FL2, shall be cumulated into monthly total flow volume records (scf or MMscf) of acid gas into each well (AGI1 and AGI2)</p> <p>(e) after the first 12-months of monitoring, monitor the monthly rolling 12-month total volume of acid gas: 1) from the Amine Unit, 2) into each well (AGI1 and AGI2), and 3) to FL2</p> <p>(3) The permittee shall monitor the pressure differential between the wellhead and the acid gas compressor discharge.</p>
<p><b>Recordkeeping:</b> The permittee shall maintain records of the monitoring required by this condition. Records shall at a minimum include the following:</p> <p>(1) Date and time a well goes offline</p> <p>(2) Duration of time a well is offline</p> <p>(3) Date and time a well comes back online</p> <p>(4) Volume of acid gases: 1) from the Amine Unit, 2) into each well (AGI1 and AGI2), and 3) to the acid gas flare (FL2).</p>
<p><b>Reporting:</b></p> <p>(1) The permittee shall report to the Permit Section Program Manager the wellhead and discharge pressures (psig) within 30 days of initial startup of each acid gas injection well.</p> <p>(2) The permittee shall report to the Department when NMOCD requests a radio-tracer study of the permittee’s AGI wells.</p> <p>(3) The permittee shall report in accordance with Condition B110.</p>

**A211 Vapor Combustion Device (Unit VCD1)**

A. Good Combustion Practices (GCP) (Unit VCD1)

<p><b>Requirement:</b> To demonstrate compliance with the allowable emission limits in Table 106.A, the BACT limits in Table 106.B, and the 98% destruction rate efficiency (DRE) for VOCs and CH4, the permittee shall meet the following GCPs.</p> <p>(1) The permittee shall conduct operational inspections, semi-annually (two times per 12-months), to determine that the vapor combustion device (VCD1) is operating properly. The permittee shall submit the manufacturer’s VCD1 specifications and an inspection protocol to the Permit Section Manager for approval by the Department within <b>3 months</b> of facility startup. At a minimum, the protocol shall include methods for inspecting and adjusting proper residence time within the combustion chamber, minimum combustion temperature, and proper air distribution. The Department shall notify the permittee of any disapproved or approved protocol, or portions thereof, and shall require protocol revisions and resubmittal of any disapproved sections within 60 days.</p> <p>(2) While waiting for approval from the Department, the permittee shall implement the proposed site specific inspection and maintenance protocol within the time lines specified in Condition B108.G.</p> <p>(3) To ensure on-going good combustion practice of the units, the permittee shall update the</p>
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approved inspection and maintenance protocol as needed based on operational experience with the unit.
<b>Monitoring:</b> Inspections and visible emissions monitoring shall be conducted when the VCD1 is operating. The permittee shall conduct the semi-annual inspections according to the Department approved inspection protocol.
<b>Recordkeeping:</b> The permittee shall keep the following records: <b>(1)</b> A copy of the manufacturer's VCD1 specifications and an inspection protocol as approved by the Department. The permittee shall also maintain a copy of the approval from the Department. <b>(2)</b> The dates, parameters inspected, the results of the inspections, and any repairs or adjustments needed as a result of the inspections. <b>(3)</b> The permittee shall also maintain records in accordance with Section B109.
<b>Reporting:</b> The permittee shall report according to Section B110.

#### B. Verification of Emission Rates (Unit VCD1)

<b>Requirement:</b> To demonstrate compliance with the allowable emission limits in Table 106.A and the BACT limits in Table 106.B, the permittee shall meet the following monitoring and recordkeeping.
<b>Monitoring:</b> <b>(1)</b> A gas flowmeter and flow totalizer, equipped with a chart recorder or data logger (electronic storage) capable of recording hourly flow volumes, shall be installed in the VCD1 gas line to measure and record the total standard cubic feet (scf) of gas sent to the VCD1 during each hour and each month.  <b>(2)</b> The permittee shall determine the VOC content, the CH <sub>4</sub> content, the CO <sub>2</sub> content, and the heating value (Btu/scf) of the gas sent to the VCD1 for combustion at least once annually with a gas analysis.  <b>(3)</b> The flow meter and totalizer shall be operated, calibrated, and maintained as specified by the manufacturer or equivalent and as necessary to ensure correct and accurate readings.
<b>Recordkeeping:</b> <b>(1)</b> The following records shall be kept: <ul style="list-style-type: none"> <li>• annual extended gas analysis</li> <li>• hourly and monthly flowmeter and flow totalizer measurements of gas sent to the VCD1</li> </ul> <b>(2)</b> Each month, the permittee shall record and summarize in a table format the following. <ul style="list-style-type: none"> <li>• percent VOC, CH<sub>4</sub>, and CO<sub>2</sub> content</li> <li>• gas heating value (Btu/scf)</li> <li>• the maximum hourly gas flow rate (scf/hr) that occurred during the month</li> <li>• the hourly gas flow rate (scf/hr) for any hours that exceeded any pph or lb/MMBtu emission limit during the month</li> <li>• the total month's scf of gas sent to the VCD1</li> </ul>

- during the first 12-months of monitoring, the cumulative total of gas sent to the VCD1 (scf/yr)
- after the first 12-months of monitoring, the monthly rolling 12-month total of gas sent to the VCD1 (scf/yr)

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

(4) Each month to demonstrate compliance with emission limits, the permittee shall calculate and summarize the maximum pph and lb/MMBtu emission rate, any pph and/or lb/MMBtu emission rate exceeding the permitted limits, and the ton per year emission rates of NO<sub>x</sub>, CO, VOC, and CO<sub>2</sub>e using the following information:

- the VOC, CH<sub>4</sub>, and CO<sub>2</sub> content, and the gas heating value (MMBtu/scf) from the most recent gas analysis
- the emission factors used to calculate NO<sub>x</sub> and CO
- the maximum hourly gas flow rate (scf/hr)
- the hourly gas flow rate (scf/hr) for any hours that exceeded any emission limit during the month
- during the first 12 months of monitoring, the cumulative total of gas sent to the VCD1
- after the first 12-months of monitoring, the monthly rolling 12-month total of gas sent to the VCD1 (scf/yr)

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

**PART B GENERAL CONDITIONS****B100 Introduction**

- A. The Department has reviewed the permit application for the proposed construction/modification/revision and has determined that the provisions of the Act and ambient air quality standards will be met. Conditions have been imposed in this permit to assure continued compliance. 20.2.72.210.D NMAC, states that any term or condition imposed by the Department on a permit is enforceable to the same extent as a regulation of the Environmental Improvement Board.

**B101 Legal**

- A. The contents of a permit application specifically identified by the Department shall become the terms and conditions of the permit or permit revision. Unless modified by conditions of this permit, the permittee shall construct or modify and operate the Facility in accordance with all representations of the application and supplemental submittals that the Department relied upon to determine compliance with applicable regulations and ambient air quality standards. If the Department relied on air quality modeling to issue this permit, any change in the parameters used for this modeling shall be submitted to the Department for review. Upon the Department's request, the permittee shall submit additional modeling for review by the Department. Results of that review may require a permit modification. (20.2.72.210.A NMAC)
- B. Any future physical changes, changes in the method of operation or changes in restricted area may constitute a modification as defined by 20.2.72 NMAC, Construction Permits. Unless the source or activity is exempt under 20.2.72.202 NMAC, no modification shall begin prior to issuance of a permit. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)
- C. Changes in plans, specifications, and other representations stated in the application documents shall not be made if they cause a change in the method of control of emissions or in the character of emissions, will increase the discharge of emissions or affect modeling results. Any such proposed changes shall be submitted as a revision or modification. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)
- D. The permittee shall establish and maintain the property's Restricted Area as identified in plot plan submitted with the application. (20.2.72 NMAC Sections 200.A.2 and E, and 210.B.4)
- E. Applications for permit revisions and modifications shall be submitted to:  
Program Manager, Permits Section

New Mexico Environment Department  
Air Quality Bureau  
525 Camino de los Marquez, Suite 1  
Santa Fe, NM 87505

- F. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate the source including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. (20.2.7.109, 20.2.72.210.A, 20.2.72.210.B, 20.2.72.210.C, 20.2.72.210.E NMAC) The establishment of allowable malfunction emission limits does not supersede this requirement.

**B102 Authority**

- A. This permit is issued pursuant to the Air Quality Control Act (Act) and regulations adopted pursuant to the Act including Title 20, Chapter 2, Part 72 of the New Mexico Administrative Code (NMAC), (20.2.72 NMAC), Construction Permits and is enforceable pursuant to the Act and the air quality control regulations applicable to this source.
- B. The Department is the Administrator for 40 CFR Parts 60, 61, and 63 pursuant to the delegation and exceptions of Section 10 of 20.2.77 NMAC (NSPS), 20.2.78 NMAC (NESHAP), and 20.2.82 NMAC (MACT).

**B103 Annual Fee**

- A. The Department will assess an annual fee for this Facility. The regulation 20.2.75 NMAC set the fee amount at \$1,500 through 2004 and requires it to be adjusted annually for the Consumer Price Index on January 1. The current fee amount is available by contacting the Department or can be found on the Department's website. The AQB will invoice the permittee for the annual fee amount at the beginning of each calendar year. This fee does not apply to sources which are assessed an annual fee in accordance with 20.2.71 NMAC. For sources that satisfy the definition of "small business" in 20.2.75.7.F NMAC, this annual fee will be divided by two. (20.2.75.11 NMAC)
- B. All fees shall be remitted in the form of a corporate check, certified check, or money order made payable to the "NM Environment Department, AQB" mailed to the address shown on the invoice and shall be accompanied by the remittance slip attached to the invoice.

**B104 Appeal Procedures**

- A. Any person who participated in a permitting action before the Department and who is adversely affected by such permitting action, may file a petition for hearing before the Environmental Improvement Board. The petition shall be made in writing to the Environmental Improvement Board within thirty (30) days from the date notice is given of the Department's action and shall specify the portions of the permitting action to which the petitioner objects, certify that a copy of the petition has been mailed or hand-delivered and attach a copy of the permitting action for which review is sought. Unless a timely request for hearing is made, the decision of the Department shall be final. The petition shall be copied simultaneously to the Department upon receipt of the appeal notice. If the petitioner is not the applicant or permittee, the petitioner shall mail or hand-deliver a copy of the petition to the applicant or permittee. The Department shall certify the administrative record to the board. Petitions for a hearing shall be sent to: (20.2.72.207.F NMAC)

Secretary, New Mexico Environmental Improvement Board  
1190 St. Francis Drive, Runnels Bldg. Rm. N2153  
Santa Fe, New Mexico 87502

**B105 Submittal of Reports and Certifications**

- A. Stack Test Protocols and Stack Test Reports shall be submitted electronically to [Stacktest.AQB@state.nm.us](mailto:Stacktest.AQB@state.nm.us) or as directed by the Department.
- B. Excess Emission Reports shall be submitted as directed by the Department. (20.2.7.110 NMAC)
- C. Routine reports shall be submitted to the mailing address below, or as directed by the Department:

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

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

- A. If a facility is subject to a NSPS standard in 40 CFR 60, each owner or operator that installs and operates a continuous monitoring device required by a NSPS regulation shall comply with the excess emissions reporting requirements in accordance with 40 CFR 60.7(c), unless specifically exempted in the applicable subpart.

- B. If a facility is subject to a NSPS standard in 40 CFR 60, then in accordance with 40 CFR 60.8(c), emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.
- C. If a facility is subject to a MACT standard in 40 CFR 63, then the facility is subject to the requirement for a Startup, Shutdown and Malfunction Plan (SSM) under 40 CFR 63.6(e)(3), unless specifically exempted in the applicable subpart.

**B107 Startup, Shutdown, and Maintenance Operations**

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

**B108 General Monitoring Requirements**

- A. These requirements do not supersede or relax requirements of federal regulations.
- B. The following monitoring requirements shall be used to determine compliance with applicable requirements and emission limits. Any sampling, whether by portable analyzer or EPA reference method, that measures an emission rate over the applicable averaging period greater than an emission limit in this permit constitutes noncompliance with this permit. The Department may require, at its discretion, additional tests pursuant to EPA Reference Methods at any time, including when sampling by portable analyzer measures an emission rate greater than an emission limit in this permit; but such requirement shall not be construed as a determination that the sampling by portable analyzer does not establish noncompliance with this permit and shall not stay enforcement of such noncompliance based on the sampling by portable analyzer.
- C. If the emission unit is shutdown at the time when periodic monitoring is due to be accomplished, the permittee is not required to restart the unit for the sole purpose of performing the monitoring. Using electronic or written mail, the permittee shall notify the Department's Compliance and Enforcement Section of a delay in emission tests prior to the deadline for accomplishing the tests. Upon recommencing operation, the permittee shall submit any pertinent pre-test notification requirements set forth in the current version of the Department's Standard Operating Procedures For Use Of Portable Analyzers in Performance Test, and shall accomplish the monitoring.

- D. The requirement for monitoring during any monitoring period is based on the percentage of time that the unit has operated. However, to invoke the monitoring period exemption at B108.D(2), hours of operation shall be monitored and recorded.
- (1) If the emission unit has operated for more than 25% of a monitoring period, then the permittee shall conduct monitoring during that period.
  - (2) If the emission unit has operated for 25% or less of a monitoring period then the monitoring is not required. After two successive periods without monitoring, the permittee shall conduct monitoring during the next period regardless of the time operated during that period, except that for any monitoring period in which a unit has operated for less than 10% of the monitoring period, the period will not be considered as one of the two successive periods.
  - (3) If invoking the monitoring **period** exemption in B108.D(2), the actual operating time of a unit shall not exceed the monitoring period required by this permit before the required monitoring is performed. For example, if the monitoring period is annual, the operating hours of the unit shall not exceed 8760 hours before monitoring is conducted. Regardless of the time that a unit actually operates, a minimum of one of each type of monitoring activity shall be conducted during any five-year period.
- E. For all periodic monitoring events, except when a federal or state regulation is more stringent, three test runs shall be conducted at 90% or greater of the unit's capacity as stated in this permit, or in the permit application if not in the permit, and at additional loads when requested by the Department. If the 90% capacity cannot be achieved, the monitoring will be conducted at the maximum achievable load under prevailing operating conditions except when a federal or state regulation requires more restrictive test conditions. The load and the parameters used to calculate it shall be recorded to document operating conditions and shall be included with the monitoring report.
- F. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions.
- G. If monitoring is new or is in addition to monitoring imposed by an existing applicable requirement, it shall become effective 120 days after the date of permit issuance. For emission units that have not commenced operation, the associated new or additional monitoring shall not apply until 120 days after the units commence operation. All pre-existing monitoring requirements incorporated in this permit shall continue to apply from the date of permit issuance.

**B109 General Recordkeeping Requirements**

- A. The permittee shall maintain records to assure and verify compliance with the terms and conditions of this permit and any other applicable requirements that become effective after permit issuance. The minimum information to be included in these records is:
- (1) equipment identification (include make, model and serial number for all tested equipment and emission controls);
  - (2) date(s) and time(s) of sampling or measurements;
  - (3) date(s) analyses were performed;
  - (4) the qualified entity that performed the analyses;
  - (5) analytical or test methods used;
  - (6) results of analyses or tests; and
  - (7) operating conditions existing at the time of sampling or measurement.
- B. Except as provided in the Specific Conditions, records shall be maintained on-site or at the permittee's local business office for a minimum of two (2) years from the time of recording and shall be made available to Department personnel upon request. Sources subject to 20.2.70 NMAC "Operating Permits" shall maintain records on-site for a minimum of five (5) years from the time of recording.
- C. Malfunction emissions and routine and predictable emissions during startup, shutdown, and scheduled maintenance (SSM):
- (1) The permittee shall keep records of all events subject to the plan to minimize emissions during routine or predictable SSM. (20.2.7.14.A NMAC)
  - (2) If the facility has allowable SSM emission limits in this permit, the permittee shall record all SSM events, including the date, the start time, the end time, a description of the event, and a description of the cause of the event. This record also shall include a copy of the manufacturer's, or equivalent, documentation showing that any maintenance qualified as scheduled. Scheduled maintenance is an activity that occurs at an established frequency pursuant to a written protocol published by the manufacturer or other reliable source. The authorization of allowable SSM emissions does not supersede any applicable federal or state standard. The most stringent requirement applies.
  - (3) If the facility has allowable malfunction emission limits in this permit, the permittee shall record all malfunction events to be applied against these limits, including the date, the start time, the end time, and a description of the event. **Malfunction means** any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the

potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 63.2, 20.2.7.7.E NMAC) The authorization of allowable malfunction emissions does not supersede any applicable federal or state standard. The most stringent requirement applies. This authorization only allows the permittee to avoid submitting reports under 20.2.7 NMAC for total annual emissions that are below the authorized malfunction emission limit.

**B110 General Reporting Requirements**

(20.2.72 NMAC Sections 210 and 212)

- A. Records and reports shall be maintained on-site or at the permittee's local business office unless specifically required to be submitted to the Department or EPA by another condition of this permit or by a state or federal regulation. Records for unmanned sites may be kept at the nearest business office.
- B. The permittee shall notify the Department's Compliance Reporting Section using the current Submittal Form posted to NMED's Air Quality web site under Compliance and Enforcement/Submittal Forms in writing of, or provide the Department with (20.2.72.212.A and B):
  - (1) the anticipated date of initial startup of each new or modified source not less than thirty (30) days prior to the date. Notification may occur prior to issuance of the permit, but actual startup shall not occur earlier than the permit issuance date;
  - (2) after receiving authority to construct, the equipment serial number as provided by the manufacturer or permanently affixed if shop-built and the actual date of initial startup of each new or modified source within fifteen (15) days after the startup date; and
  - (3) the date when each new or modified emission source reaches the maximum production rate at which it will operate within fifteen (15) days after that date.
- C. The permittee shall notify the Department's Permitting Program Manager, in writing of, or provide the Department with (20.2.72.212.C and D):
  - (1) any change of operators or any equipment substitutions within fifteen (15) days of such change;
  - (2) any necessary update or correction no more than sixty (60) days after the operator knows or should have known of the condition necessitating the update or correction of the permit.
- D. Results of emission tests and monitoring for each pollutant (except opacity) shall be reported in pounds per hour (unless otherwise specified) and tons per year. Opacity shall be reported in percent. The number of significant figures corresponding to the

full accuracy inherent in the testing instrument or Method test used to obtain the data shall be used to calculate and report test results in accordance with 20.2.1.116.B and C NMAC. Upon request by the Department, CEMS and other tabular data shall be submitted in editable, MS Excel format.

- E. The permittee shall submit reports of excess emissions in accordance with 20.2.7.110.A NMAC.

### **B111 General Testing Requirements**

#### A. Compliance Tests

- (1) Compliance test requirements from previous permits (if any) are still in effect, unless the tests have been satisfactorily completed. Compliance tests may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions. (20.2.72 NMAC Sections 210.C and 213)
- (2) Compliance tests shall be conducted within sixty (60) days after the unit(s) achieve the maximum normal production rate. If the maximum normal production rate does not occur within one hundred twenty (120) days of source startup, then the tests must be conducted no later than one hundred eighty (180) days after initial startup of the source.
- (3) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 60 minutes and each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with an applicable emission limit, the arithmetic mean of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Department approval, be determined using the arithmetic mean of the results of the two other runs.
- (4) Testing of emissions shall be conducted with the emissions unit operating at 90 to 100 percent of the maximum operating rate allowed by the permit. If it is not possible to test at that rate, the source may test at a lower operating rate, subject to the approval of the Department.
- (5) Testing performed at less than 90 percent of permitted capacity will limit emission unit operation to 110 percent of the tested capacity until a new test is conducted.

- (6) If conditions change such that unit operation above 110 percent of tested capacity is possible, the source must submit a protocol to the Department within 30 days of such change to conduct a new emissions test.

**B. EPA Reference Method Tests**

- (1) All compliance tests required by this permit, unless otherwise specified by Specific Conditions of this permit, shall be conducted in accordance with the requirements of CFR Title 40, Part 60, Subpart A, General Provisions, and the following EPA Reference Methods as specified by CFR Title 40, Part 60, Appendix A:
  - (a) Methods 1 through 4 for stack gas flowrate
  - (b) Method 5 for TSP
  - (c) Method 6C and 19 for SO<sub>2</sub>
  - (d) Method 7E for NO<sub>x</sub> (test results shall be expressed as nitrogen dioxide (NO<sub>2</sub>) using a molecular weight of 46 lb/lb-mol in all calculations (each ppm of NO/NO<sub>2</sub> is equivalent to 1.194 x 10<sup>-7</sup> lb/SCF)
  - (e) Method 9 for opacity
  - (f) Method 10 for CO
  - (g) Method 19 may be used in lieu of Methods 1-4 for stack gas flowrate upon approval of the Department. A justification for this proposal must be provided along with a contemporaneous fuel gas analysis (preferably on the day of the test) and a recent fuel flow meter calibration certificate (within the most recent quarter).
  - (h) Method 7E or 20 for Turbines per 60.335 or 60.4400
  - (i) Method 29 for Metals
  - (j) Method 201A for filterable PM<sub>10</sub> and PM<sub>2.5</sub>
  - (k) Method 202 for condensable PM
  - (l) Method 320 for organic Hazardous Air Pollutants (HAPs)
  - (m) Method 25A for VOC reduction efficiency
- (2) Alternative test method(s) may be used if the Department approves the change

**C. Periodic Monitoring and Portable Analyzer Requirements**

- (1) Periodic emissions tests (periodic monitoring) may be conducted in accordance with EPA Reference Methods or by utilizing a portable analyzer. Periodic monitoring utilizing a portable analyzer shall be conducted in accordance with the requirements of ASTM D 6522-00. However, if a facility has met a

previously approved Department criterion for portable analyzers, the analyzer may be operated in accordance with that criterion until it is replaced.

- (2) Unless otherwise indicated by Specific Conditions or regulatory requirements, the default time period for each test run shall be **at least** 20 minutes.

Each performance test shall consist of three separate runs. The arithmetic mean of results of the three runs shall be used to determine compliance with the applicable emission limit.

- (3) Testing of emissions shall be conducted in accordance with the requirements at Section B108.E.
- (4) During emissions tests, pollutant, O<sub>2</sub> concentration and fuel flow rate shall be monitored and recorded. This information shall be included with the test report furnished to the Department.
- (5) Pollutant emission rate shall be calculated in accordance with 40 CFR 60, Appendix A, Method 19 utilizing fuel flow rate (scf) and fuel heating value (Btu/scf) obtained during the test.

D. Test Procedures:

- (1) The permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test date and allow a representative of the Department to be present at the test.
- (2) Equipment shall be tested in the "as found" condition. Equipment may not be adjusted or tuned prior to any test for the purpose of lowering emissions, and then returned to previous settings or operating conditions after the test is complete.
- (3) Contents of test notifications, protocols and test reports shall conform to the format specified by the Department's Universal Test Notification, Protocol and Report Form and Instructions. Current forms and instructions are posted to NMED's Air Quality web site under Compliance and Enforcement Testing.
- (4) The permittee shall provide (a) sampling ports adequate for the test methods applicable to the facility, (b) safe sampling platforms, (c) safe access to sampling platforms and (d) utilities for sampling and testing equipment.
- (5) The stack shall be of sufficient height and diameter and the sample ports shall be located so that a representative test of the emissions can be performed in accordance with the requirements of EPA Method 1 or ASTM D 6522-00 as applicable.
- (6) Where necessary to prevent cyclonic flow in the stack, flow straighteners shall be installed

- (7) Unless otherwise indicated by Specific Conditions or regulatory requirements, test reports shall be submitted to the Department no later than 30 days after completion of the test.

**B112 Compliance**

- A. The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)
- B. A copy of the most recent permit(s) issued by the Department shall be kept at the permitted facility or (for unmanned sites) at the nearest company office and shall be made available to Department personnel for inspection upon request. (20.2.72.210.B.4 NMAC)
- C. Emissions limits associated with the energy input of a Unit, i.e. lb/MMBtu, shall apply at all times unless stated otherwise in a Specific Condition of this permit. The averaging time for each emissions limit, including those based on energy input of a Unit (i.e. lb/MMBtu) is one (1) hour unless stated otherwise in a Specific Condition of this permit or in the applicable requirement that establishes the limit.

**B113 Permit Cancellation and Revocation**

- A. The Department may revoke this permit if the applicant or permittee has knowingly and willfully misrepresented a material fact in the application for the permit. Revocation will be made in writing, and an administrative appeal may be taken to the Secretary of the Department within thirty (30) days. Appeals will be handled in accordance with the Department's Rules Governing Appeals From Compliance Orders.
- B. The Department shall automatically cancel any permit for any source which ceases operation for five (5) years or more, or permanently. Reactivation of any source after the five (5) year period shall require a new permit. (20.2.72 NMAC)

- C. The Department may cancel a permit if the construction or modification is not commenced within two (2) years from the date of issuance or if, during the construction or modification, work is suspended for a total of one (1) year. (20.2.72 NMAC)

**B114 Notification to Subsequent Owners**

- A. The permit and conditions apply in the event of any change in control or ownership of the Facility. No permit modification is required in such case. However, in the event of any such change in control or ownership, the permittee shall notify the succeeding owner of the permit and conditions and shall notify the Department's Program Manager, Permits Section of the change in ownership within fifteen (15) days of that change. (20.2.72.212.C NMAC)
- B. Any new owner or operator shall notify the Department's Program Manager, Permits Section, within thirty (30) days of assuming ownership, of the new owner's or operator's name and address. (20.2.73.200.E.3 NMAC)

**B115 Asbestos Demolition**

- A. Before any asbestos demolition or renovation work, the permittee shall determine whether 40 CFR 61 Subpart M, National Emissions Standards for Asbestos applies. If required, the permittee shall notify the Department's Program Manager, Compliance and Enforcement Section using forms furnished by the Department.

**B116 Short Term Engine Replacement**

- A. The following Alternative Operating Scenario (AOS) addresses engine breakdown or periodic maintenance and repair, which requires the use of a short term replacement engine. The following requirements do not apply to engines that are exempt per 20.2.72.202.B(3) NMAC. Changes to exempt engines must be reported in accordance with 20.2.72.202.B NMAC. A short term replacement engine may be substituted for any engine allowed by this permit for no more than 120 days in any rolling twelve month period per permitted engine. The compliance demonstrations required as part of this AOS are in addition to any other compliance demonstrations required by this permit.
  - (1) The permittee may temporarily replace an existing engine that is subject to the emission limits set forth in this permit with another engine regardless of manufacturer, model, and horsepower without modifying this permit. The permittee shall submit written notification to the Department within 15 days of the date of engine substitution according to condition B110.C(1).

- (a) The potential emission rates of the replacement engine shall be determined using the replacement engine’s manufacturer specifications and shall comply with the existing engine’s permitted emission limits.
- (b) The direction of the exhaust stack for the replacement engine shall be either vertical or the same direction as for the existing engine. The replacement engine’s stack height and flow parameters shall be at least as effective in the dispersion of air pollutants as the modeled stack height and flow parameters for the existing permitted engine. The following equation may be used to show that the replacement engine disperses pollutants as well as the existing engine. The value calculated for the replacement engine on the right side of the equation shall be equal to or greater than the value for the existing engine on the left side of the equation. The permitting page of the Air Quality Bureau website contains a spreadsheet that performs this calculation.

EXISTING ENGINE

REPLACEMENT ENGINE

$$\frac{[(g) \times (h1)] + [(v1)^2/2] + [(c) \times (T1)]}{q1} \leq \frac{[(g) \times (h2)] + [(v2)^2/2] + [(c) \times (T2)]}{q2}$$

Where

g = gravitational constant = 32.2 ft/sec<sup>2</sup>

h1 = existing stack height, feet

v1 = exhaust velocity, existing engine, feet per second

c = specific heat of exhaust, 0.28 BTU/lb-degree F

T1 = absolute temperature of exhaust, existing engine = degree F + 460

q1 = permitted allowable emission rate, existing engine, lbs/hour

h2 = replacement stack height, feet

v2 = exhaust velocity, replacement engine, feet per second

T2 = absolute temperature of exhaust, replacement engine = degree F + 460

q2 = manufacturer’s potential emission rate, replacement engine, lbs/hour

The permittee shall keep records showing that the replacement engine is at least as effective in the dispersion of air pollutants as the existing engine.

- (c) Test measurement of NOx and CO emissions from the temporary replacement engine shall be performed in accordance with Section B111 with the exception of Condition B111A(3) and B111B for EPA Reference Methods Tests or Section B111C for portable analyzer test measurements. Compliance test(s) shall be conducted within fifteen (15) days after the unit begins operation, and records of the results shall be kept according to section B109.B. This test shall be performed even if the engine is removed prior to 15 days on site.

- i. These compliance tests are not required for an engine certified under 40CFR60, subparts IIII, or JJJJ, or 40CFR63, subpart ZZZZ if the permittee demonstrates that one of these requirements causes such engine to comply with all emission limits of this permit. The permittee shall submit this demonstration to the Department within 48 hours of placing the new unit into operation. This submittal shall include documentation that the engine is certified, that the engine is within its useful life, as defined and specified in the applicable requirement, and shall include calculations showing that the applicable emissions standards result in compliance with the permit limits.
    - ii. These compliance tests are not required if a test was conducted by portable analyzer or by EPA Method test (including any required by 40CFR60, subparts IIII and JJJJ and 40CFR63, subpart ZZZZ) within the last 12 months. These previous tests are valid only if conducted at the same or lower elevation as the existing engine location prior to commencing operation as a temporary replacement. A copy of the test results shall be kept according to section B109.B.
  - (d) Compliance tests for NOx and CO shall be conducted if requested by the Department in writing to determine whether the replacement engine is in compliance with applicable regulations or permit conditions.
  - (e) Upon determining that emissions data developed according to B116.A.1(c) fail to indicate compliance with either the NOx or CO emission limits, the permittee shall notify the Department within 48 hours. Also within that time, the permittee shall implement one of the following corrective actions:
    - i. The engine shall be adjusted to reduce NOx and CO emissions and tested per B116.A.1(c) to demonstrate compliance with permit limits.
    - ii. The engine shall discontinue operation or be replaced with a different unit.
- (2) Short term replacement engines, whether of the same manufacturer, model, and horsepower, or of a different manufacturer, model, or horsepower, are subject to all federal and state applicable requirements, regardless of whether they are set forth in this permit (including monitoring and recordkeeping), and shall be subject to any shield afforded by this permit.
- (3) The permittee shall maintain a contemporaneous record documenting the unit number, manufacturer, model number, horsepower, emission factors, emission test results, and serial number of any existing engine that is replaced, and the replacement engine. Additionally, the record shall document the replacement

duration in days, and the beginning and end dates of the short term engine replacement.

- (4) The permittee shall maintain records of a regulatory applicability determination for each replacement engine (including 40CFR60, subparts IIII and JJJJ and 40CFR63, subpart ZZZZ) and shall comply with all associated regulatory requirements.
- B. Additional requirements for replacement of engines at sources that are major as defined in regulation 20.2.74 NMAC, Permits – Prevention of Significant Deterioration, section 7.AF. For sources that are major under PSD, the total cumulative operating hours of the replacement engine shall be limited using the following procedure:
- (1) Daily, the actual emissions from the replacement engine of each pollutant regulated by this permit for the existing engine shall be calculated and recorded.
  - (2) The sum of the total actual emissions since the commencement of operation of the replacement engine shall not exceed the significant emission rates in Table 2 of 20.2.74 NMAC, section 502 for the time that the replacement engine is located at the facility.
- C. All records required by this section shall be kept according to section B109.

## **PART C MISCELLANEOUS**

### **C100 Supporting On-Line Documents**

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

### **C101 Definitions**

- A. **“Daylight”** is defined as the time period between sunrise and sunset, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at <http://aa.usno.navy.mil/>. Alternatively, these times can be obtained from a Farmer's Almanac or from <http://www.almanac.com/rise/>).

- B. **“Exempt Sources”** and **“Exempt Activities”** is defined as those sources or activities that are exempted in accordance with 20.2.72.202 NMAC. Note; exemptions are only valid for most 20.2.72 NMAC permitting actions.
- C. **“Fugitive Emission”** means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- D. **“Insignificant Activities”** means those activities which have been listed by the department and approved by the administrator as insignificant on the basis of size, emissions or production rate. Note; insignificant activities are only valid for 20.2.70 NMAC permitting actions.
- E. **“Natural Gas”** is defined as a naturally occurring fluid mixture of hydrocarbons that contains 20.0 grains or less of total sulfur per 100 standard cubic feet (SCF) and is either composed of at least 70% methane by volume or has a gross calorific value of between 950 and 1100 Btu per standard cubic foot. (40 CFR 60.631)
- F. **“Natural Gas Liquids”** means the hydrocarbons, such as ethane, propane, butane, and pentane, that are extracted from field gas. (40 CFR 60.631)
- G. **“National Ambient air Quality Standards”** means, unless otherwise modified, the primary (health-related) and secondary (welfare-based) federal ambient air quality standards promulgated by the US EPA pursuant to Section 109 of the Federal Act.
- H. **“Night”** is the time period between sunset and sunrise, as defined by the Astronomical Applications Department of the U.S. Naval Observatory. (Data for one day or a table of sunrise/sunset for an entire year can be obtained at <http://aa.usno.navy.mil/>. Alternatively, these times can be obtained from a Farmer’s Almanac or from <http://www.almanac.com/rise/>).
- I. **“Night Operation or Operation at Night”** is operating a source of emissions at night.
- J. **“NO<sub>2</sub>”** or "Nitrogen dioxide" means the chemical compound containing one atom of nitrogen and two atoms of oxygen, for the purposes of ambient determinations. The term "**nitrogen dioxide**," for the purposes of stack emissions monitoring, shall include nitrogen dioxide (the chemical compound containing one atom of nitrogen and two atoms of oxygen), nitric oxide (the chemical compound containing one atom of nitrogen and one atom of oxygen), and other oxides of nitrogen which may test as nitrogen dioxide and is sometimes referred to as NO<sub>x</sub> or NO<sub>2</sub>. (20.2.2 NMAC)
- K. **“NO<sub>x</sub>”** see NO<sub>2</sub>

- L. **“Pipeline Quality Natural Gas”** means natural gas containing no more than 5.0 grains of total sulfur per 100 dry standard cubic feet natural gas.
- M. **“Potential Emission Rate”** means the emission rate of a source at its maximum capacity to emit a regulated air contaminant under its physical and operational design, provided any physical or operational limitation on the capacity of the source to emit a regulated air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its physical and operational design only if the limitation or the effect it would have on emissions is enforceable by the department pursuant to the Air Quality Control Act or the federal Act.
- N. **“Restricted Area”** is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.
- O. **"Shutdown"** for requirements under 20.2.72 NMAC, means the cessation of operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing out of batch process units.
- P. **"SSM"** for requirements under 20.2.7 NMAC, means routine or predictable startup, shutdown, or scheduled maintenance.
  - (1) **"Shutdown"** for requirements under 20.2.7 NMAC, means the cessation of operation of any air pollution control equipment or process equipment.
  - (2) **"Startup"** for requirements under 20.2.7 NMAC, means the setting into operation of any air pollution control equipment or process equipment.
- Q. **"Startup"** for requirements under 20.2.72 NMAC, means the setting into operation of any air pollution control equipment, process equipment or process for any purpose, except routine phasing in of batch process units.

**C102 Acronyms**

2SLB .....	2-stroke lean burn
4SLB .....	4-stroke lean burn
4SRB .....	4-stroke rich burn
acfm.....	actual cubic feet per minute
AFR.....	air fuel ratio
AP-42 .....	EPA Air Pollutant Emission Factors
AQB .....	Air Quality Bureau

AQCR .....	Air Quality Control Region
ASTM .....	American Society for Testing and Materials
Btu.....	British thermal unit
CAA .....	Clean Air Act of 1970 and 1990 Amendments
CEM.....	continuous emissions monitoring
cfh .....	cubic feet per hour
cfm .....	cubic feet per minute
CFR.....	Code of Federal Regulation
CI .....	compression ignition
CO.....	carbon monoxides
COMS .....	continuous opacity monitoring system
EIB .....	Environmental Improvement Board
EPA.....	United States Environmental Protection Agency
gr/100 cf.....	grains per one hundred cubic feet
gr/dscf .....	grains per dry standard cubic foot
GRI.....	Gas Research Institute
HAP.....	hazardous air pollutant
hp .....	horsepower
H <sub>2</sub> S .....	hydrogen sulfide
IC .....	internal combustion
KW/hr .....	kilowatts per hour
lb/hr.....	pounds per hour
lb/MMBtu .....	pounds per million British thermal unit
MACT .....	Maximum Achievable Control Technology
MMcf/hr.....	million cubic feet per hour
MMscf.....	million standard cubic feet
N/A.....	not applicable
NAAQS.....	National Ambient Air Quality Standards
NESHAP .....	National Emission Standards for Hazardous Air Pollutants
NG .....	natural gas
NGL .....	natural gas liquids
NMAAQS .....	New Mexico Ambient Air Quality Standards
NMAC.....	New Mexico Administrative Code
NMED.....	New Mexico Environment Department
NMSA.....	New Mexico Statues Annotated
NO <sub>x</sub> .....	nitrogen oxides
NSCR .....	non-selective catalytic reduction
NSPS .....	New Source Performance Standard
NSR.....	New Source Review
PEM .....	parametric emissions monitoring
PM.....	particulate matter (equivalent to TSP, total suspended particulate)
PM <sub>10</sub> .....	particulate matter 10 microns and less in diameter
PM <sub>2.5</sub> .....	particulate matter 2.5 microns and less in diameter
pph.....	pounds per hour

ppmv .....	parts per million by volume
PSD .....	Prevention of Significant Deterioration
RATA.....	Relative Accuracy Test Assessment
RICE .....	reciprocating internal combustion engine
rpm .....	revolutions per minute
scfm.....	standard cubic feet per minute
SI .....	spark ignition
SO <sub>2</sub> .....	sulfur dioxide
SSM.....	Startup Shutdown Maintenance (see SSM definition)
TAP.....	Toxic Air Pollutant
TBD.....	to be determined
THC.....	total hydrocarbons
TSP.....	Total Suspended Particulates
tpy .....	tons per year
ULSD .....	ultra low sulfur diesel
USEPA.....	United States Environmental Protection Agency
UTM.....	Universal Transverse Mercator Coordinate system
UTMH.....	Universal Transverse Mercator Horizontal
UTMV.....	Universal Transverse Mercator Vertical
VHAP.....	volatile hazardous air pollutant
VOC .....	volatile organic compounds