

DRAFT

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

MEMORANDUM

October 21, 2025

TO: Phillip Fielder, P.E., Chief Engineer

THROUGH: Rick Groshong, Compliance and Enforcement Group Manager

THROUGH: Eric L. Milligan, P.E., Manager, Engineering Section

THROUGH: Junru Wang, P.E., Existing Source Permits Section

FROM: Iftekhar Hossain, P.E., New Source Permits Section

SUBJECT: Evaluation of Permit Application No. **2020-0500-C (M-2)**
Mustang Gas Products, LLC
Binger Gas Plant (Facility ID: 1085)
Section 26, Township 10N, Range 11W, Binger, Caddo County, Oklahoma
Latitude 35.31528° N, Longitude 98.32443° W
Driving Directions: Proceed east from Binger (S. Broadway and E. Main St.)
0.6 miles to Cemetery Road. Turn left (north) on Cemetery Road and travel
approximately 0.6 miles. The facility is located on the west side of the road.

SECTION I. INTRODUCTION

Mustang Gas Products LLC (Mustang) has submitted a construction permit application for the Binger Gas Plant (SCI 1321/NAICS 211130). This is an existing facility and is currently operating under Permit No. 2020-0500-TVR4 (M-1) issued on June 15, 2022. The facility is a PSD-major source in an attainment area and a minor source of HAPs.

In this permit action, Mustang is proposing to incorporate two scenarios to get a flexible construction permit. **Scenario 1** is to allow for the addition of three (3) new Waukesha L7042GSI S5 engines and **Scenario 2** is for three (3) new Caterpillar G3516B engines and assumes continuous (8,760 hours/year) operations. Mustang would like to maintain both options in the construction permit as Scenario 1 and Scenario 2. Once operations commence, Mustang will update the equipment list in the operating permit application.

The requested modifications (Project) are either considered a “physical change” or “change in the method of operation.” As listed in SECTION II, the changes are considered to be a “*significant modification*,” of the existing major source. As specified under OAC 252:100-8-7.2(b)(2), this Project requires a construction permit and the application and associated permit are subject to **Tier II** permitting. A construction permit is also required because, as per 252:100-8-4(a)(1)(B)(iv), the net emissions increase of NO_x, CO, and VOC are more than 10 TPY each. The applicant requested and was approved for the “Traditional NSR process.” Public review of the application and the draft permit (when available) are required.

The facility emits more than 100 tons per year (TPY) of a regulated pollutant, it is subject to Part 70 permitting requirements. Emission units (EUs) have been arranged into Emission Unit Groups (EUGs) as shown in the "Equipment" section (SECTION VI). Field-grade natural gas is the primary fuel with the facility being operated continuously.

SECTION II. REQUESTED CHANGES IN THIS PERMIT

The project consists of the following.

Add/replace the following equipment at the facility.

1. Add three (3) natural gas-fired compressor engines (CM-2326, CM-2327, and CM-2328). Scenario 1 adds Waukesha L7042GSI S5 engines and Scenario 2 adds Caterpillar G3516B engines.
2. Add two (2) 300-bbl (each) condensate storage tanks (TK-4 and TK-5).
3. Convert two (2) condensate storage tanks (TK-2 and TK-3) to 300-bbl (each).
4. Add one (1) vapor recovery unit (VRU) to control tanks (TK-2 through TK-5) emissions.
5. Replace one (1) glycol reboiler (0.5 MMBTUH to 1.0 MMBTU).
6. Replace the four (4) 8,820-gallon condensate tanks (TK-2, TK-3, TK-4, and TK-5) with 12,600-gallon condensate tanks.

In addition, there will be an increase in the processing capacity of the plant (from 17 MMSCFD to 35 MMSCFD) due to these changes. This requires,

1. Update of the emissions of several emissions units because of using new sample analysis. This includes dehydration unit, amine unit, condensate storage tanks, and condensate truck loading.
2. Update of the permitted emissions limits for existing engines CM-2322, CM-2323, CM-2324B, and CM-2819. The existing permit (No. 2020-0500-TVR4 (M-1)) is based on the following emissions factors.

EU ID #	Engine Specification	NOx g/hp-hr	CO g/hp-hr	VOC g/hp-hr	H ₂ CO lb/MMBTU
EU-CM-2322	White-Superior 12G825	18.0	18.0	2.0	0.0205
EU-CM-2323	Waukesha L7042GSI w/CC	3.0	4.0	1.0	0.0205
EU-CM-2324B	Waukesha L7042GSI w/CC	3.0	4.0	1.0	0.0205
EU-CM-2819	Waukesha L7042GSI w/CC	3.0	4.0	1.0	0.0205

This permit's emissions of the above engines are based on lowered emissions factors as listed in SECTION VII (Emission). The facility is imposing lower emissions factors and emissions to 'offset' emissions related to the project.

3. Incorporation of fugitive emissions from the new process piping components that will be subject to the Leak Detection and Monitoring (LDAR) requirements of NSPS, Subpart OOOOb.

SECTION III. PROCESS DESCRIPTION

The facility is a natural gas processing plant which extracts natural gas liquids from inlet gas. Products from the facility process include natural gas liquids and pipeline quality natural gas. Natural gas enters the facility through several inlet separators. Water and condensate from the inlet separators are stored in two condensate tanks. Emissions from the condensate storage tanks are controlled by a VRU. Inlet gas then passes through inlet compressors to the cryogenic process. Gas first enters the glycol dehydration unit then proceeds to be dried in the inlet gas mole sieve dehydrators and then gas and liquid product are separated through a series of temperature and pressure changes. The natural gas liquid (NGL) product is sent to an amine unit for CO₂ removal and then to the sales pipeline. There is no flash tank associated with the amine unit, because with a liquid treater, the amine solution mixes with the natural gas liquids to remove the CO₂. The CO₂ remains in solution. The CO₂ doesn't change to the vapor phase until it is heated in the Lean/Rich exchanger and finally stripped out by the steam from the reboiler. The residue gas from the cryogenics process is recompressed and some residue gas is used to regenerate the mole sieve dehydrator as well as the amine unit. Regenerated gas from the mole sieve co-mingles with the residue gas and is sent to sales. The maximum gas throughput for the facility is 35.0 MMSCFD.

SECTION IV. PERMIT HISTORY

The following permitting actions have been submitted for the facility since the issuance of third renewal of the permit (Permit No. 2015-1174-TVR3 issued on April 27, 2016) of this facility.

Permit No.	Date Issued	Description
2020-0500-TVR4 (M-1)	6/15/2022	Admin amendment to update the EU name.
2020-0500-TVR4	3/31/2022	Fourth Title V permit renewal
2015-1174-C (M-3)	6/14/2021	Minor modification to install one engine (CM-4203R), replace an existing glycol dehydrator and reboiler, increase inlet gas throughput, and revise the amine unit emissions.
2015-1174-C (M-2)	12/14/2020	Significant modification to install one engine (CM-2819) and install a catalytic converter on an existing engine (CM-2323).
2015-1174-TVR3 (M-1)	6/20/2019	Minor modification to remove one grandfathered engine (CM-3) and install one engine (CM-2324).
2015-1174-TVR3	4/27/2016	Third Title V permit renewal

SECTION V. FACILITY-SPECIFIC OR REPRESENTATIVE SAMPLE

The applicant collected new liquid and gas samples and submitted revised emissions for non-pressurized storage tanks, glycol dehydration unit, and fugitive emissions.

1. Condensate properties are being updated based on a facility-specific liquid analysis dated July 24, 2024.
2. Gas properties are being updated based on a facility-specific inlet gas analysis dated August 1, 2024.

TANKS

Tank Considerations	Yes	No
The facility submitted a facility-specific extended gas analysis of the inlet gas.	X	
The sample was no older than three (3) calendar years at the time of submittal.	X	

DEHYDRATION UNIT

Glycol Dehydrator Considerations	Yes	No
The facility submitted a facility-specific extended gas analysis of the inlet gas.	X	
The sample was no older than three (3) calendar years at the time of submittal.	X	

FUGITIVES

Well Site Fugitive Considerations	Yes	No
The facility submitted a facility-specific sample of the inlet gas or sales gas.	X	
The facility submitted a representative facility sample of the inlet gas or sales gas from a representative facility that is within 10 miles and producing from the same formation(s).		X
The facility did not submit a liquid sample and assumed 100% VOC content for the liquid service components.		X
The facility submitted a facility-specific sample of the VOC containing liquid.	X	
The sample was no older than three (3) calendar years at the time of submittal.	X	

SECTION VI. EQUIPMENT**EUG-3A Permitted Engines (Not Subject to NSPS Subpart JJJJ)**

EU	Point	Description	HP	Serial #	Mfg/Const. Date
EU-CM-2819	P-CM-2819	Waukesha L7042GSI *	1,232	176332A	1969/2021
EU-CM-2322	P-CM-2322	White-Superior 12G825	1,200	268329	1976/2017
EU-CM-2323	P-CM-2323	Waukesha L7042GSI *	1,232	279904	1976 ¹
EU-CM-2324B	P-CM-2324B	Waukesha L7042GSI *	1,232	288950	1975/2024
EU-CM-2325B	P-CM-2325B	Waukesha L7042GSI *	1,232	287379	1975/2022

* 4-stroke rich burn (4S-RB) with non-selective catalytic reduction (NSCR) catalyst and air-to-fuel ratio controller (AFRC).

¹ Manufactured in 1976 and CC was installed in 2021.

EUG-3B Permitted Engine (Subject to NSPS Subpart JJJJ)**For Scenario 1**

EU	Point	Description	HP	Serial #	Mfg./Const. Date
EU-CM-4203R	P-CM-4203R	Caterpillar G3508B ULB**	690	N8C00148	2017/2021
EU-CM-2326	P-CM-2326	Waukesha L7042GSI S5*	1,500	TBD	TBD

EU	Point	Description	HP	Serial #	Mfg./Const. Date
EU-CM-2327	P-CM-2327	Waukesha L7042GSI S5*	1,500	TBD	TBD
EU-CM-2328	P-CM-2328	Waukesha L7042GSI S5*	1,500	TBD	TBD

* 4S-RB with NSCR catalyst and AFRC.

** 4-stroke lean burn (4S-LB) with oxidation catalyst and AFRC.

For Scenario 2

EU	Point	Description	HP	Serial #	Mfg./Const. Date
EU-CM-4203R	P-CM-4203R	Caterpillar G3508B ULB*	690	N8C00148	2017/2021
EU-CM-2326	P-CM-2326	Caterpillar G3516B*	1,380	TBD	TBD
EU-CM-2327	P-CM-2327	Caterpillar G3516B*	1,380	TBD	TBD
EU-CM-2328	P-CM-2328	Caterpillar G3516B*	1,380	TBD	TBD

* 4S-LB with oxidation catalyst and AFRC.

EUG-3C Compressors Associated with Engines EUG-3A and 3B

For Scenario 1

EU	Point	Description	HP	Serial #	Mfg./Const. Date
EU-CM-2819	P-CM-2819	Ingersol RDS compressor	1,232	YPS-181	1971
EU-CM-2322	P-CM-2322	White W-64 compressor	1,200	264970	1975
EU-CM-2323	P-CM-2323	Ingersol RDS compressor	1,232	YRS-688	1974
EU-CM-2324B	P-CM-2324B	Ingersol RDS compressor	1,232	YRS-781	1975
EU-CM-2325B	P-CM-2325B	Ingersol RDS compressor	1,232	YRS-910	1976
EU-CM-4203R	P-CM-4203R	Ariel JGE/2 compressor	690	F20261	10/2004
EU-CM-2326	P-CM-2326	(TBD) compressor	1,500	TBD	TBD
EU-CM-2327	P-CM-2327	(TBD) compressor	1,500	TBD	TBD
EU-CM-2328	P-CM-2328	(TBD) compressor	1,500	TBD	TBD

For Scenario 2

EU	Point	Description	HP	Serial #	Mfg./Const. Date
EU-CM-2819	P-CM-2819	Ingersol RDS compressor	1,232	YPS-181	1971
EU-CM-2322	P-CM-2322	White W-64 compressor	1,200	264970	1975
EU-CM-2323	P-CM-2323	Ingersol RDS compressor	1,232	YRS-688	1974
EU-CM-2324B	P-CM-2324B	Ingersol RDS compressor	1,232	YRS-781	1975
EU-CM-2325B	P-CM-2325B	Ingersol RDS compressor	1,232	YRS-910	1976
EU-CM-4203R	P-CM-4203R	Ariel JGE/2 compressor	690	F20261	10/2004
EU-CM-2326	P-CM-2326	(TBD) compressor	1,380	TBD	TBD
EU-CM-2327	P-CM-2327	(TBD) compressor	1,380	TBD	TBD
EU-CM-2328	P-CM-2328	(TBD) compressor	1,380	TBD	TBD

EUG-4A Glycol Dehydrator

EU	Point	Description	Mfg./Const. Date
EU-DEHY-1	P-DEHY-1	Still Vent/Flash Tank Vent	2007/2021

EUG-4B Glycol Reboiler

EU	Point	Description	MMBTUH	Construction Date
EU-RB-2 *	P-RB-2	Glycol Reboiler	1.0	2024

* EU-RB-1 of 0.5 MMBTUH has been replaced by EU-RB-2 of 1.0 MMBTUH.

EUG-5 Regeneration Heater

EU	Point	Description	MMBTUH	Construction Date
EU-HT-1	P-HT-1	Mole Sieve Regeneration Heater	1.0	1976

EUG-6A Condensate Storage Tanks

EU	Point	Description	Capacity (gallons)	Construction Date
EU-TK-2	P-TK-2	Condensate Tank	12,600	2025
EU-TK-3	P-TK-3	Condensate Tank	12,600	2025
EU-TK-4	P-TK-4	Condensate Tank	12,600	2025
EU-TK-5	P-TK-5	Condensate Tank	12,600	2025

EUG-6B Insignificant Storage Tanks

EU	Point	Description	Capacity (gallons)	Construction Date
EU-TK-1	P-TK-1	Slop Oil/Drip Oil	4,200	1976
EU-TK-6	P-TK-6	Slop Oil	8,820	1976
EU-TK-7	P-TK-7	Glycol	118	Unknown
EU-TK-8	P-TK-8	Lube Oil Tank	660	1976
EU-TK-9	P-TK-9	Lube Oil Tank	660	1976
EU-TK-10	P-TK-10	Lube Oil Tank	660	1976
EU-TK-11	P-TK-11	Lube Oil Tank	660	1976
EU-TK-12	P-TK-12	Methanol Tank	576	1976
EU-TK-13	P-TK-13	Methanol Tank	600	1976
EU-TK-14	P-TK-14	Lube Oil Tank	6,000	1976
EU-TK-15	P-TK-15	Waste Tank	100	1976
EU-TK-16	P-TK-16	Antifreeze	660	Unknown
EU-TK-17	P-TK-17	Antifreeze	660	Unknown
EU-TK-18	P-TK-18	Deionized Water	2,500	Unknown
EU-TK-19	P-TK-19	Amine	525	Unknown
EU-TK-20	P-TK-20	Drip Waste Recovery	250	Unknown
EU-TK-21	P-TK-21	Propane *	1,000	Unknown

EU	Point	Description	Capacity (gallons)	Construction Date
EU-TK-22	P-TK-22	Glycol Storage Tank	500	2018
EU-TK-23	P-TK-23	Glycol Storage Tank	600	2018

* Mustang operates this tank. The tank is owned by Rosser.

EUG-7A OOOOb Process Piping Fugitives

Component	Service	Components #
Valves	Gas/Vapor	340
Connectors	Gas/Vapor	1,810
Flanges`	Gas/Vapor	360
Compressor Seals	Gas/Vapor	8
Relief Valves	Gas/Vapor	15
Valves	Light Liquid	320
Connectors	Light Liquid	1,895
Flanges`	Light Liquid	223
Pump Seals	Light Liquid	6

EUG 8 Equipment Blowdowns

EU	Point	Equipment	MMSCF/Yr	Construction Date
ATMV-1	ATMV-1	Atmospheric Vent	105 with 0.17% VOC	1976

EUG-9 Amine Unit

EU	Point	Description	MMBTUH	Construction Date
AMINE	AMINE	Amine Unit Vent	--	2005
HT-3	HT-3	Amine Reboiler	1.0	2005

EUG 10 Condensate Loading

EU	Point	Equipment	Volume, bbl/yr	Construction Date
TL-1	TL-1	Condensate Loading	36,500	1976

SECTION VII. EMISSIONS

ENGINES

Emissions are estimated for each of two (2) operating scenarios. **Scenario 1** is for three (3) new Waukesha engines and **Scenario 2** is for three (3) new Caterpillar engines.

Emissions estimates for the compressor engines are based on continuous operation. The emission factors for NO_x, CO, and VOC for existing engines EU-CM-2322, EU-CM-2323, EU-CM-2324B, EU-CM-2325B, EU-CM-2819 are reduced from existing factors to avoid exceeding PSD thresholds, thus avoiding an otherwise applicable limit. The emission factors for H₂CO for existing

engines are based on AP-42 (7/00), Section 3.2, 4-stroke, rich-burn engines, Note that, CM-4203R will not be affected by this project. Mustang is not requesting any emission limit changes for CM-4203R. The engine is for backup re-compressor which only operates if the existing engines malfunction due to unforeseen problems during normal operations. For new engines (CM-2326-CM-2328), the emission factors are based on NSPS Subpart JJJJ limits. The emission factors for H₂CO for new engines are selected to 0.05 g/hp-hr for new Waukesha engines for Scenario 1 and 0.11 g/hp-hr for new Caterpillar engines for Scenario 2. VOC emissions factors for new engines do not include H₂CO. However, VOC emissions in the engine emissions table and FW emissions table include H₂CO.

Emission Factors for Engines (For Scenario 1)

EU	Engine Specification	NO _x g/hp-hr	CO g/hp-hr	VOC g/hp-hr	H ₂ CO lb/MMBtu
EU-CM-2322	White-Superior 12G825	16.0	16.0	2.0	0.0205
EU-CM-2323	Waukesha L7042GSI ¹	2.65	3.65	0.40	0.0205
EU-CM-2324B	Waukesha L7042GSI ¹	2.65	3.65	1.00	0.0205
EU-CM-2325B	Waukesha L7042GSI ¹	2.00	3.00	0.40	0.0205
EU-CM-2819	Waukesha L7042GSI ¹	2.65	3.65	0.40	0.0205
EU-CM-4203R	Caterpillar G3508B ULB ²	1.0	2.0	0.7*	0.25 [†]
EU-CM-2326	Waukesha L7042GSI S5 ¹	1.0	2.0	0.7*	0.05 [†]
EU-CM-2327	Waukesha L7042GSI S5 ¹	1.0	2.0	0.7*	0.05 [†]
EU-CM-2328	Waukesha L7042GSI S5 ¹	1.0	2.0	0.7*	0.05 [†]

¹ 4S-RB with NSCR catalyst and AFRC.

² 4S-LB with oxidation catalyst and AFRC.

* Does not include formaldehyde

[†] units in g/hp-hr.

Emissions for Engines (For Scenario 1)

EU	Make/Model	NO _x		CO		VOC*	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-2322	White-Superior 12G825	42.33	185.40	42.33	185.40	5.29	23.18
EU-CM-2323	Waukesha L7042GSI ¹	7.20	31.53	9.91	43.42	1.09	4.76
EU-CM-2324B	Waukesha L7042GSI ¹	7.20	31.53	9.91	43.42	2.72	11.90
EU-CM-2325B	Waukesha L7042GSI ¹	5.43	23.78	8.15	35.70	1.09	4.76
EU-CM-2819	Waukesha L7042GSI ¹	7.20	31.53	9.91	43.42	1.09	4.76
EU-CM-4203R	Caterpillar G3508B ULB ²	1.52	6.66	3.04	13.33	1.45	6.33
EU-CM-2326	Waukesha L7042GSI S5 ¹	3.31	14.48	6.61	28.97	2.48	10.86
EU-CM-2327	Waukesha L7042GSI S5 ¹	3.31	14.48	6.61	28.97	2.48	10.86
EU-CM-2328	Waukesha L7042GSI S5 ¹	3.31	14.48	6.61	28.97	2.48	10.86

¹ 4S-RB with NSCR catalyst and AFRC.

² 4S-LB with oxidation catalyst and AFRC.

* Includes formaldehyde.

Emission Factors for Engines (For scenario 2)

EU	Engine Specification	NO _x g/hp-hr	CO g/hp-hr	VOC g/hp-hr	H ₂ CO lb/MMBtu
EU-CM-2322	White-Superior 12G825	16.0	16.0	2.0	0.0205
EU-CM-2323	Waukesha L7042GSI ¹	2.65	3.65	0.40	0.0205
EU-CM-2324B	Waukesha L7042GSI ¹	2.65	3.65	1.00	0.0205
EU-CM-2325B	Waukesha L7042GSI ¹	2.00	3.00	0.40	0.0205
EU-CM-2819	Waukesha L7042GSI ¹	2.65	3.65	0.40	0.0205
EU-CM-4203R	Caterpillar G3508B ULB ²	1.0	2.0	0.7*	0.25 [†]
EU-CM-2326	Caterpillar G3516B ²	1.0	2.0	0.7*	0.11 [†]
EU-CM-2327	Caterpillar G3516B ²	1.0	2.0	0.7*	0.11 [†]
EU-CM-2328	Caterpillar G3516B ²	1.0	2.0	0.7*	0.11 [†]

¹ 4S-RB with NSCR catalyst and AFRC.

² 4S-LB with oxidation catalyst and AFRC.

* Does not include formaldehyde

[†] units in g/hp-hr.

Emissions for Engines (For scenario 2)

EU	Make/Model	NO _x		CO		VOC*	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-2322	White-Superior 12G825	42.33	185.40	42.33	185.40	5.29	23.18
EU-CM-2323	Waukesha L7042GSI ¹	7.20	31.53	9.91	43.42	1.09	4.76
EU-CM-2324B	Waukesha L7042GSI ¹	7.20	31.53	9.91	43.42	2.72	11.90
EU-CM-2325B	Waukesha L7042GSI ¹	5.43	23.78	8.15	35.70	1.09	4.76
EU-CM-2819	Waukesha L7042GSI ¹	7.20	31.53	9.91	43.42	1.09	4.76
EU-CM-4203R	Caterpillar G3508B ULB ²	1.52	6.66	3.04	13.33	1.45	6.33
EU-CM-2326	Caterpillar G3516B ²	3.04	13.33	6.08	26.65	2.46	10.79
EU-CM-2327	Caterpillar G3516B ²	3.04	13.33	6.08	26.65	2.46	10.79
EU-CM-2328	Caterpillar G3516B ²	3.04	13.33	6.08	26.65	2.46	10.79

¹ 4S-RB with NSCR catalyst and AFRC.

² 4S-LB with oxidation catalyst and AFRC.

* Includes formaldehyde.

REBOILERS AND HEATER

Glycol Reboiler and Amine Reboiler combustion emissions are based on AP-42 (7/98), Section 1.4.

Reboilers/Heater Emissions Factors

EU	NO _x (lb/MMBTU)	CO (lb/MMBTU)	VOC (lb/MMBTU)
RB-2, HT-1, & HT-3	0.098	0.082	0.005

Emissions from Regenerator Heater and Reboilers

EU	Description	Rating MMBTUH	NO _x		CO		VOC	
			lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
RB-2	Glycol Reboiler	1.0	0.10	0.43	0.08	0.36	0.01	0.02
HT-1	Regen. Heater	1.0	0.10	0.43	0.08	0.36	0.01	0.02

EU	Description	Rating	NO _x		CO		VOC	
		MMBTUH	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
HT-3	Amine Reboiler	1.0	0.10	0.43	0.08	0.36	0.01	0.02

DEHYDRATION UNIT

Emissions from the glycol still vent are routed through an air cooled condenser with the non condensables routed to the reboiler firebox when it is firing, and to the atmosphere when it is not firing with a maximum total control efficiency of 83.7% based on 50% control of reboiler. Flash tank off-gases are routed to the inlet of the station resulting in a 100% control of emissions from the closed vent system. Annual emissions are based on continuous operation. Potential emissions include a 10% safety factor.

Dehydration Unit Emissions (DEHY-1)

Parameter	Data
Calculation Tool	GRI-GLYCalc 4.0
Dry Gas Flow Rate, MMSCFD	35
Glycol Pump Type	Gas
Glycol Pump Design Capacity, gpm	3.5
Regenerator Still Vent	
Condenser Outlet Temperature, °F	95°
Potential VOC Emissions, TPY	46.80
Control Type	Condenser/Combustion
Overall VOC Control Efficiency, %	83.7
Controlled VOC Emissions, TPY	7.62
Flash Tank	
Flash Tank Temperature, °F	120°
Flash Tank Pressure, psig	70
Control Type or Recycle	Facility Inlet
Potential VOC Emissions, TPY	150.77
VOC Control Efficiency, %	100
Controlled VOC Emissions, TPY	0.00
Total VOC Emissions	
Total VOC Emissions, TPY (with 10% safety factor)	8.38

AMINE UNIT

The amine unit removes CO₂ from the (liquid) NGL. Since the NGL is “sweet”, as is the gas processed by the plant, there are negligible expected H₂S emissions and a relatively small amount VOC emissions from the NGL amine vent. Potential emissions based on ProMax, extended natural gas liquid analysis, maximum amine circulation rate (11 gpm) and a maximum natural gas liquid rate of 170,500 gal/day. Emissions from the amine still vent are uncontrolled.

Amine Unit Parameters

Parameter	Data
Type of Amine	DEA
Inlet Acid Gas, MMSCFD	35
Calculation Tool	ProMax
Inlet Temperature, degrees °F	33
Inlet Pressure, psig	480
Regenerator Vent	
Control Method	None
Amine Recirculation Rate, gpm	11
Inlet H ₂ S Concentration, ppm*	2.30
Outlet H ₂ S Concentration, ppm*	< 0.01
Type of Control	None
Amine Flash Tank	None
Emissions, TPY	
VOC	15.09
H ₂ S (based on 0.3 lb/hr limit)**	1.30

*overly conservative to show compliance with 0.3 lb/hr limit. The two-year average of H₂S concentration (2018-2019) is calculated at 0.95 ppm.

**per compliance requirements of OAC 252:100-31-26.

TANKS

Emissions from storage tanks (TK-2 thru TK-5) were estimated using ProMax and a total condensate throughput of 36,500 bbl/yr (1,533,000 gal/yr).

TK-2, TK-3, TK-4, and TK-5 Emissions, per tank

Parameter	EU-TK-2, TK-3, TK-4, & TK-5
Content	Condensate
Tank Size, barrels (each)	300
Throughput, gal/yr (each)	383,250
Flash Calculation Method/Tool	ProMax Simulation
Flashing Emissions, TPY	39.48
Working/Breathing Method/Tool	ProMax Simulation
Working Emissions, TPY	2.40
Breathing Emission, TPY	2.61
VRU Control Efficiency (%) *	95
VOC Emissions (per tank), TPY	2.22

*VRU system shall operate at least 95% of the time (with 5% downtime).

LOADING

Loading emissions were estimated using ProMax and a condensate throughput of 36,500 bbl/year (1,533,000 gal/yr).

Loading Parameters and Emissions (TL-1)

Parameter	EU-LOAD
Liquids Loaded	Condensate
Throughput, gal/yr	1,533,000
VOC Emissions, TPY	5.33

VENT

Atmospheric vent (ATMV-1) emissions were based on an annual gas volume vented of 105 MMscf with 0.17% VOC.

Vent Emissions

EU	MMscf/yr	scf/lb-mol	lb/lbmole	total lb/year	wt% VOC	VOC*	
						lb/year	TPY
ATMV-1	105	379.4	16.56	4,581,433	0.17	7,917	3.96

*Includes 5% S.F.

FUGITIVES (FUG-OOOOB)

NSPS OOOOb Monitored Process Piping Fugitives' VOC emissions are based on EPA's 1995 *Protocol for Equipment Leak Emission Estimates* (EPA-453/R-95-017) and an estimated number of components and VOC (C3+) content of the materials handled. Laboratory test results yield VOC wt% of 31.84% for gas/vapor phase. VOC of 100 wt% is assumed for light liquid phase.

Fugitive Emissions

Point	VOC, TPY
Fugitives	1.69

FACILITY-WIDE EMISSIONS**Total Criteria Pollutant Emissions (Before Modification)**

EU	NO _x		CO		VOC	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-2322	47.62	208.57	47.62	208.57	5.29	23.17
EU-CM-2323	8.15	35.69	10.86	47.59	2.72	11.90
EU-CM-2324	8.15	35.69	10.86	47.59	2.72	11.90
EU-CM-2325	5.43	23.78	8.15	35.70	1.09	4.77
EU-CM-2819	8.15	35.69	10.86	47.59	2.72	11.90
EU-CM-4203R	1.52	6.66	3.04	13.33	1.45	6.33
EU-DEHY-1	--	--	--	--	2.69	11.80
EU-RB-1	0.05	0.21	0.04	0.18	<0.01	0.01
EU-HT-1	0.10	0.43	0.08	0.36	0.01	0.02
EU-HT-3	0.10	0.43	0.08	0.36	0.01	0.02
AMINE	--	--	--	--	1.17	5.11
EU-TK-2	--	--	--	--	--	15.18
EU-TK-3	--	--	--	--	--	15.18
EU-TK-12	--	--	--	--	0.01	0.01
EU-TK-13	--	--	--	--	1.00	0.01

EU	NO _x		CO		VOC	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-2322	47.62	208.57	47.62	208.57	5.29	23.17
TL-1	--	--	--	--	--	1.90
ATMV-1	--	--	--	--	--	4.57
Fugitives	--	--	--	--	1.50	6.72
Total (Before Mod)	79.27	347.15	91.59	401.27	22.38	130.50

Total Criteria Pollutant Emissions (After Modification) (Scenario 1)

EU	NO _x		CO		VOC	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-2322	42.33	185.40	42.33	185.40	5.29	23.18
EU-CM-2323	7.20	31.53	9.91	43.42	1.09	4.76
EU-CM-2324B	7.20	31.53	9.91	43.42	2.72	11.90
EU-CM-2325B	5.43	23.78	8.15	35.70	1.09	4.76
EU-CM-2819	7.20	31.53	9.91	43.42	1.09	4.76
EU-CM-4203R	1.52	6.66	3.04	13.33	1.45	6.33
CM-2326	3.31	14.48	6.61	28.97	2.48	10.86
CM-2327	3.31	14.48	6.61	28.97	2.48	10.86
CM-2328	3.31	14.48	6.61	28.97	2.48	10.86
AMINE	--	--	--	--	3.45	15.09
EU-DEHY-1	--	--	--	--	1.91	8.38
EU-RB-2	0.10	0.43	0.08	0.36	<0.01	0.02
EU-HT-1	0.10	0.43	0.08	0.36	<0.01	0.02
EU-HT-3	0.10	0.43	0.08	0.36	<0.01	0.02
EU-TK-2	--	--	--	--	--	2.22
EU-TK-3	--	--	--	--	--	2.22
EU-TK-4	--	--	--	--	--	2.22
EU-TK-5	--	--	--	--	--	2.22
EU-TK-12	--	--	--	--	--	0.01
EU-TK-13	--	--	--	--	--	0.01
TL-1	--	--	--	--	--	5.33
ATMV-1	--	--	--	--	--	3.96
Fugitives	--	--	--	--	1.50	6.72
OOOb Fugitives	--	--	--	--	0.39	1.69
Totals (After Mod)	81.09	355.16	103.35	452.68	27.42	138.42
Total (Before Mod)	79.27	347.15	91.59	401.27	22.38	130.50
Difference	1.83	8.00	11.74	51.42	6.44	9.57

Total Criteria Pollutant Emissions (After Modification) (Scenario 2)

EU	NO _x		CO		VOC	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-2322	42.33	185.40	42.33	185.40	5.29	23.18
EU-CM-2323	7.20	31.53	9.91	43.42	1.09	4.76
EU-CM-2324B	7.20	31.53	9.91	43.42	2.72	11.90
EU-CM-2325B	5.43	23.78	8.15	35.70	1.09	4.76
EU-CM-2819	7.20	31.53	9.91	43.42	1.09	4.76
EU-CM-4203R	1.52	6.66	3.04	13.33	1.45	6.33

EU	NO _x		CO		VOC	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
CM-2326	3.04	13.33	6.08	26.65	2.46	10.79
CM-2327	3.04	13.33	6.08	26.65	2.46	10.79
CM-2328	3.04	13.33	6.08	26.65	2.46	10.79
AMINE	--	--	--	--	3.45	15.09
EU-DEHY-1	--	--	--	--	1.91	8.38
EU-RB-2	0.10	0.43	0.08	0.36	<0.01	0.02
EU-HT-1	0.10	0.43	0.08	0.36	<0.01	0.02
EU-HT-3	0.10	0.43	0.08	0.36	<0.01	0.02
EU-TK-2	--	--	--	--	--	2.22
EU-TK-3	--	--	--	--	--	2.22
EU-TK-4	--	--	--	--	--	2.22
EU-TK-5	--	--	--	--	--	2.22
EU-TK-12	--	--	--	--	--	0.01
EU-TK-13	--	--	--	--	--	0.01
TL-1	--	--	--	--	--	5.33
ATMV-1	--	--	--	--	--	3.96
Fugitives	--	--	--	--	1.50	6.72
OOOb Fugitives	--	--	--	--	0.39	1.69
Totals (After Mod)	80.29	351.69	101.76	445.73	27.37	138.21
Total (Before Mod)	79.27	347.15	91.59	401.27	22.38	130.50
Difference	1.03	4.53	10.15	44.47	6.40	9.36

HAP EMISSIONS FROM THE ENGINES

The primary HAP emitted from the engines is H₂CO. Emissions of H₂CO for CM-2322, CM-2323, CM-2324B, CM-2325B, and CM-2819 are based on AP-42 (7/00), Section 3.2. Emissions of H₂CO from CM-4203R is based on the manufacturer's data. Emissions of H₂CO from CM-2326, CM-2327, and CM-2328 are selected as 0.05 g/hp-hr for the new Waukesha engines (that are based on manufacturer's specifications) for Scenario 1. Compliance with the CO emission limits for these engines is deemed compliance with the formaldehyde emission limits based on the AQD surrogate policy.. The applicable requirement has been incorporated into the permit.

Emissions of H₂CO from CM-2326, CM-2327, and CM-2328 are selected as 0.11 g/hp-hr for the new Caterpillar engines (to avoid the major source threshold of 10 TPY) for Scenario 2. Mustang will conduct initial and subsequent performance tests for formaldehyde on each new engine (of Scenario 2) to demonstrate initial and continued compliance with the applicable formaldehyde limits. The testing frequency and the testing methodology have been incorporated into the permit.

H₂CO Emissions from Engines (*Scenario 1*)

EU	Description	Heat Input, MMBTUH	Emission Factor lb/MMBTU	H ₂ CO	
				lb/hr	TPY
EU-CM-2322	White-Superior 12G825	8.3	0.0205	0.17	0.74
EU-CM-2323	Waukesha L7042GSI ¹	7.8	0.0205	0.16	0.70
EU-CM-2324B	Waukesha L7042GSI ¹	7.8	0.0205	0.16	0.70
EU-CM-2325B	Waukesha L7042GSI ¹	7.8	0.0205	0.16	0.70

EU	Description	Heat Input, MMBTUH	Emission Factor lb/MMBTU	H ₂ CO	
				lb/hr	TPY
EU-CM-2819	Waukesha L7042GSI ¹	7.8	0.0205	0.16	0.70
EU-CM-4203R	Caterpillar G3508B ULB ²	5.1	0.25 [†]	0.38	1.67
EU-CM-2326	Waukesha L7042GSI S5 ¹	10.9	0.05 [†]	0.17	0.72
EU-CM-2327	Waukesha L7042GSI S5 ¹	10.9	0.05 [†]	0.17	0.72
EU-CM-2328	Waukesha L7042GSI S5 ¹	10.9	0.05 [†]	0.17	0.72
Totals				1.70	7.37

¹ 4S-RB with NSCR catalyst and AFRC.

² 4S-LB with oxidation catalyst and AFRC.

[†]units in g/hp-hr.

H₂CO Emissions from Engines (Scenario 2)

EU	Description	Heat Input, MMBTUH	Emission Factor lb/MMBTU	H ₂ CO	
				lb/hr	TPY
EU-CM-2322	White-Superior 12G825	8.3	0.0205	0.17	0.74
EU-CM-2323	Waukesha L7042GSI ¹	7.8	0.0205	0.16	0.70
EU-CM-2324B	Waukesha L7042GSI ¹	7.8	0.0205	0.16	0.70
EU-CM-2325B	Waukesha L7042GSI ¹	7.8	0.0205	0.16	0.70
EU-CM-2819	Waukesha L7042GSI ¹	7.8	0.0205	0.16	0.70
EU-CM-4203R	Caterpillar G3508B ULB ²	5.1	0.25 [†]	0.38	1.67
EU-CM-2326	Caterpillar G3516B ²	9.73	0.11 [†]	0.33	1.47
EU-CM-2327	Caterpillar G3516B ²	9.73	0.11 [†]	0.33	1.47
EU-CM-2328	Caterpillar G3516B ²	9.73	0.11 [†]	0.33	1.47
Totals				2.18	9.62

¹ 4S-RB with NSCR catalyst and AFRC.

² 4S-LB with oxidation catalyst and AFRC.

[†] units in g/hp-hr.

HAP EMISSIONS FROM DEHYDRATION UNIT

The dehydration unit using a glycol desiccant emits benzene, toluene, ethyl benzene, xylenes (BTEX) and n-hexane from the glycol reboiler vapor stack. These compounds are regulated as HAP. The applicant performed a gas analysis for the concentration of BTEX and n-hexane for the TEG glycol dehydrator inlet gas in August 1, 2024. The following table lists emissions of HAP from the still vent are based on an overall control of the condenser and combustion are as shown in the table below. A 10% safety factor is also added for the variability of the gas.

HAP Emissions from the TEG Dehydration unit and Flash Tank

HAP	Uncontrolled Emissions (TPY)		Control Efficiency (%)		Safety Factor	Controlled Emissions
	Still vent	Flash tank	Condenser+ Combustion	Flash Tank	(%)	TPY
Benzene	4.07	0.31	91.08%	100%	10%	0.40

HAP	Uncontrolled Emissions (TPY)		Control Efficiency (%)		Safety Factor	Controlled Emissions
	Still vent	Flash tank	Condenser+ Combustion	Flash Tank	(%)	TPY
Toluene	4.91	0.26	96.95%	100%	10%	0.16
Ethylbenzene	0.00	0.00	0.00%	100%	10%	0.00
Xylenes	6.88	0.13	99.21%	100%	10%	0.06
n-Hexane	4.73	11.39	86.80%	100%	10%	0.69
Totals						1.31

Since emissions of each HAP is less than 10 TPY and total HAP for each scenario are less than 25 TPY the facility is an area source of HAP.

SECTION VIII. PSD APPLICABILITY ANALYSIS

This PSD applicability analysis is based on the Baseline Actual Emission (BAE) to Projected Actual Emission (PAE).

The purpose of the modification (see SECTION II) is to add/replace several emission units and change emission limits of several emission units to avoid some applicable requirement to which the source would otherwise be subject. Such terms and conditions include federally-enforceable emissions caps assumed to avoid classification as a modification under any provisions of Title I.

Baseline actual emissions (BAE) from the facility are based on historical actual emissions (2022-2023) for criteria pollutants. BAE for new units are equal to zero. Both for Scenario 1 and Scenario 2, the Projected Actual Emissions (PAE) for new units (CM-2326, CM-2327, CM-2328, TK-4, TK-5, and fugitives (OOOOb) are equal to their Potential-to-Emit (PTE). This permit's emissions of the existing engines (EU-CM-2322, EU-CM-2323, EU-CM-2324B, and EU-CM-2819) are based on lowered emissions factors as listed in SECTION VII (Emission). The facility has proposed doing so to avoid exceeding PSD thresholds which is taking a limit to avoid an otherwise applicable limit. The applicant stated that the engine CM-4203R, being a backup re-compressor for existing engines, will not be affected by this project. Mustang is not requesting any emission limit changes for CM-4203R. Therefore, this engine has not been included in the analysis. PAE for dehydration unit, amine unit and associated reboilers, tanks, loadings, and fugitive emissions are based on the PTE. PM₁₀/PM_{2.5}, H₂S, and SO₂ emissions are not addressed here because they are negligible at this facility. Annual methanol emissions from storage tanks TK-12 and TK-13 are below EI reporting thresholds, therefore, baseline actual emissions were not used in the determination. Instead permitted potential emissions were conservatively increased by 50% for the projected emissions and to account for the proposed changes. The difference in PAE and BAE are less than the PSD thresholds and therefore no further analysis is required.

Projected Actual Emissions (PAE) for Affected EU (for Scenario 1)

EU Description	EU ID #	NO _x	CO	VOC
		(TPY)	(TPY)	(TPY)
CM-2322	CM-2322	185.40	185.40	23.18

EU Description	EU ID #	NO _x	CO	VOC
		(TPY)	(TPY)	(TPY)
CM-2323	CM-2323	31.53	43.42	4.76
CM-2324B	CM-2324B	31.53	43.42	11.90
CM-2325B	CM-2325B	23.78	35.70	4.76
CM-2819	CM-2819	31.53	43.42	4.76
CM-2326	CM-2326	14.48	28.97	10.86
CM-2327	CM-2327	14.48	28.97	10.86
CM-2328	CM-2328	14.48	28.97	10.86
Amine Unit	AMINE-1	--	--	15.09
Glycol Dehy Unit	DEHY-1	--	--	8.38
Glycol Dehy Reboiler	RB-2	0.43	0.36	0.02
TK-2	TK-2	--	--	2.22
TK-3	TK-3	--	--	2.22
TK-4	TK-4	--	--	2.22
TK-5	TK-5	--	--	2.22
TK-12	TK-12	--	--	0.02
TK-13	TK-13	--	--	0.02
TL-1	TL-1	--	--	5.33
Atmospheric Vent	ATMV-1	--	--	3.96
FUG-OOOOb	FUG-OOOOb	--	--	1.69
Subtotals		347.64	438.64	125.33

Projected Actual Emissions (PAE) for Affected EU (for Scenario 2)

EU Description	EU ID #	NO _x	CO	VOC
		(TPY)	(TPY)	(TPY)
CM-2322	CM-2322	185.40	185.40	23.18
CM-2323	CM-2323	31.53	43.42	4.76
CM-2324B	CM-2324B	31.53	43.42	11.90
CM-2325B	CM-2325B	23.78	35.70	4.76
CM-2819	CM-2819	31.53	43.42	4.76
CM-2326	CM-2326	13.33	26.65	10.79
CM-2327	CM-2327	13.33	26.65	10.79
CM-2328	CM-2328	13.33	26.65	10.79
Amine Unit	AMINE-1	--	--	15.09
Glycol Dehy Unit	DEHY-1	--	--	8.38
Glycol Dehy Reboiler	RB-2	0.43	0.36	0.02
TK-2	TK-2	--	--	2.22
TK-3	TK-3	--	--	2.22
TK-4	TK-4	--	--	2.22
TK-5	TK-5	--	--	2.22
TK-12	TK-12	--	--	0.02
TK-13	TK-13	--	--	0.02
TL-1	TL-1	--	--	5.33
Atmospheric Vent	ATMV-1	--	--	3.96
FUG-OOOOb	FUG-OOOOb	--	--	1.69
Subtotals		344.19	431.67	123.89

Baseline Actual Emissions (BAE) for Affected EU

EU ID #	NO _x (TPY)			CO (TPY)			VOC (TPY)		
	2022	2023	Avg	2022	2023	Avg	2022	2023	Avg
CM-2322	206.88	200.36	203.62	206.88	200.36	203.62	22.99	22.26	22.63
CM-2323	34.84	34.38	34.61	46.46	45.84	46.15	11.61	11.46	11.54
CM-2324B	34.99	33.72	34.36	46.66	44.96	45.81	11.66	11.24	11.45
CM-2325	23.25	20.95	22.10	34.87	31.42	33.15	4.65	4.19	4.42
CM-2819	35.42	34.34	34.88	47.22	45.79	46.51	11.81	11.45	11.63
CM-2326	--	--	--	--	--	--	--	--	--
CM-2327	--	--	--	--	--	--	--	--	--
CM-2328	--	--	--	--	--	--	--	--	--
AMINE-1	--	--	--	--	--	--	5.11	5.11	5.11
DEHY-1	--	--	--	--	--	--	1.18	1.23	1.21
RB-1	0.20	0.17	0.19	0.16	0.14	0.15	0.01	0.01	0.01
TK-2	--	--	--	--	--	--	7.27	11.93	9.60
TK-3	--	--	--	--	--	--	4.08	11.55	7.82
TK-4	--	--	--	--	--	--	--	--	--
TK-5	--	--	--	--	--	--	--	--	--
TK-12	--	--	--	--	--	--	--	--	--
TK-13	--	--	--	--	--	--	--	--	--
TL-1	--	--	--	--	--	--	0.63	1.51	1.07
ATMV-1	--	--	--	--	--	--	4.57	4.57	4.57
Process Fugitives	--	--	--	--	--	--	--	--	--
BAE	335.58	323.92	329.76	382.25	368.51	375.39	85.57	96.51	91.06

PSD Applicability Test (PAE-BAE) (for Scenario 1)

EU Description	EU ID #	NO _x	CO	VOC
		TPY	TPY	TPY
CM-2322	CM-2322	-18.22	-18.22	0.56
CM-2323	CM-2323	-3.08	-2.73	-6.78
CM-2324B	CM-2324B	-2.83	-2.39	0.45
CM-2325B	CM-2325B	1.68	2.56	0.34
CM-2819	CM-2819	-3.35	-3.08	-6.87
CM-2326	CM-2326	14.48	28.97	10.86
CM-2327	CM-2327	14.48	28.97	10.86
CM-2328	CM-2328	14.48	28.97	10.86
Amine Unit	AMINE-1	0.00	0.00	9.98
Glycol Dehy Unit	DEHY-1	0.00	0.00	7.18
Glycol Dehy Reboiler	RB-2	0.25	0.21	0.01
TK-2	TK-2	0.00	0.00	-7.38
TK-3	TK-3	0.00	0.00	-5.59
TK-4	TK-4	0.00	0.00	2.22
TK-5	TK-5	0.00	0.00	2.22
TK-12	TK-12	0.00	0.00	0.02
TK-13	TK-13	0.00	0.00	0.02
TL-1	TL-1	0.00	0.00	4.26
Atmospheric Vent	ATMV-1	0.00	0.00	-0.67

EU Description	EU ID #	NO _x	CO	VOC
		TPY	TPY	TPY
Fugitives	Process Fugitives	0.00	0.00	1.69
	(PAE – BAE)	32.36	92.21	39.76
PSD Significance Levels		40	100	40
Subject to PSD Review?		No	No	No

PSD Applicability Test (PAE-BAE) (for Scenario 2)

EU Description	EU ID #	NO _x	CO	VOC
		TPY	TPY	TPY
CM-2322	CM-2322	-18.22	-18.22	0.56
CM-2323	CM-2323	-3.08	-2.73	-6.78
CM-2324B	CM-2324B	-2.83	-2.39	0.45
CM-2325B	CM-2325B	1.68	2.56	0.34
CM-2819	CM-2819	-3.35	-3.08	-6.87
CM-2326	CM-2326	13.33	26.65	10.79
CM-2327	CM-2327	13.33	26.65	10.79
CM-2328	CM-2328	13.33	26.65	10.79
Amine Unit	AMINE-1	0.00	0.00	9.98
Glycol Dehy Unit	DEHY-1	0.00	0.00	7.18
Glycol Dehy Reboiler	RB-2	0.25	0.21	0.01
TK-2	TK-2	0.00	0.00	-7.38
TK-3	TK-3	0.00	0.00	-5.59
TK-4	TK-4	0.00	0.00	2.22
TK-5	TK-5	0.00	0.00	2.22
TK-12	TK-12	0.00	0.00	0.02
TK-13	TK-13	0.00	0.00	0.02
TL-1	TL-1	0.00	0.00	4.26
Atmospheric Vent	ATMV-1	0.00	0.00	-0.61
Fugitives	FUG-OOOOb	0.00	0.00	1.69
	(PAE – BAE)	14.43	56.28	34.06
PSD Significance Levels		40	100	40
Subject to PSD Review?		No	No	No

As shown in the table above, this proposed modification is not subject to PSD review. The project only increases are less than the PSD thresholds and therefore no further analysis is required.

SECTION IX. INSIGNIFICANT ACTIVITIES

The insignificant activities identified and justified in the application are duplicated below. Records are available to confirm the insignificance of the activities. Appropriate recordkeeping of activities indicated below with “*” is specified in the Specific Conditions. Any Activity to which a state or federal applicable requirement applies is not insignificant even if it is included on this list.

1. Space heaters, boilers, process heaters, and emergency flares less than or equal to 5 MMBTUH heat input (commercial natural gas). The facility currently contains a 0.5 MMBTUH glycol reboiler, a 1.0 MMBTUH mole sieve regeneration heater, an emergency blowdown, condensate loading, a 1.0 MMBTUH emergency flare, and a 1.0 MMBTUH amine reboiler.
2. *Emissions from crude oil or condensate storage marine and truck loading equipment operations at crude oil and natural gas production sites where the loading rate does not exceed 10,000 gallons per day averaged over a 30-day period. The maximum anticipated condensate throughput (18,250 bbl) is equivalent to 2,027 gallons per day.
3. Emissions from crude oil and condensate storage tanks with a capacity of less than or equal to 420,000 gallons that store crude oil and condensate prior to custody transfer (as defined by Subpart Kb). There are none identified, but may be used in the future.
4. * Emissions from storage tanks constructed with a capacity less than 39,894 gallons which store VOC with a vapor pressure less than 1.5 psia at maximum storage temperature. Glycol, amine, and lube oil storage tanks all have capacities less than 39,894 gallons and store liquids with a vapor pressure below 1.5 psia at maximum storage temperature.
5. Welding and soldering operations utilizing less than 100 pounds of solder and 53 tons per year of electrodes. Welding and soldering are conducted as part of plant maintenance operations, which are listed “trivial activities;” therefore, no recordkeeping will be required.
6. Surface coating operations which do not exceed a combined total usage of more than 60 gallons/month of coatings, thinners, and clean-up solvents at any one emission unit. Surface coating is conducted as part of plant maintenance operations, which are listed “trivial activities;” therefore, no recordkeeping will be required.
7. * Activities having the potential to emit no more than 5 TPY of any criteria pollutant. The methanol tanks, blowdowns, and truck loading operation are in this category.

SECTION X. OKLAHOMA AIR POLLUTION CONTROL RULES

OAC 252:100-1 (General Provisions) [Applicable]

Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference) [Applicable]

This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations. These requirements are addressed in the “Federal Regulations” section.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]

Primary Standards are in Appendix E and Secondary Standards are in Appendix F of the Air Pollution Control Rules. At this time, all of Oklahoma is in attainment of these standards.

OAC 252:100-5 (Registration, Emissions Inventory and Annual Operating Fees) [Applicable]

Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories have been submitted and fees paid for the past years.

OAC 252:100-8 (Permits for Part 70 Sources)

[Applicable]

Part 5 includes the general administrative requirements for part 70 permits. Any planned changes in the operation of the facility which result in emissions not authorized in the permit and which exceed the “Insignificant Activities” or “Trivial Activities” thresholds require prior notification to Air Quality Division (AQD) and may require a permit modification. Insignificant activities mean individual emission units that either are on the list in Appendix I (OAC 252:100) or whose actual calendar year emissions do not exceed the following limits:

- 5 TPY of any one criteria pollutant; and
- 2 TPY of any one HAP or 5 TPY of multiple HAPs or 20% of any threshold less than 10 TPY for a HAP that the EPA may establish by rule.

Emission limitations and operational requirements necessary to assure compliance with all applicable requirements for all sources are based on information in the application and the current operating permit or developed from the applicable requirements.

Section 8-4 requires a construction permit prior to the following:

- Construction of a new source that would require an operating permit under 40 CFR Part 70;
- Reconstruction of a major HAP source under 40 CFR Part 63;
- Any physical change or change in method of operation that would be a significant modification under OAC 252:100-8-7.2(b)(2); or
- Any physical change or change in method of operation that would increase the PTE of any one regulated air pollutant by more than 10 TPY, calculated using the approach in 40 CFR § 49.153(b).

This is a construction permit for construction at an existing facility that will require a significant modification to an existing operating permit under OAC 252:100-8-7.2(b)(2).

OAC 252:100-9 (Excess Emissions Reporting Requirements)

[Applicable]

Except as provided in OAC 252:100-9-7(a)(1), the owner or operator of a source of excess emissions shall notify the Director as soon as possible but no later than 4:30 p.m. the following working day of the first occurrence of excess emissions in each excess emission event. No later than thirty (30) calendar days after the start of any excess emission event, the owner or operator of an air contaminant source from which excess emissions have occurred shall submit a report for each excess emission event describing the extent of the event and the actions taken by the owner or operator of the facility in response to this event. Request for mitigation, as described in OAC 252:100-9-8, shall be included in the excess emission event report. Additional reporting may be required in the case of ongoing emission events and in the case of excess emissions reporting required by 40 CFR Parts 60, 61, or 63.

OAC 252:100-13 (Open Burning)

[Applicable]

Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter.

OAC 252:100-19 (Particulate Matter)

[Applicable]

Section 19-4 regulates emissions of PM from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. Fuel-burning equipment is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy. Thus, the engines and heaters are subject to the requirements of this subchapter. Appendix C specifies a PM emission limitation of 0.60 lbs/MMBTU for all equipment at this facility with a heat input rating of 10 MMBTUH or less.

Table 3.2-2 of AP-42 (7/00) lists the total PM emissions from 4-stroke, lean-burn natural gas-fired engines to be 0.01 lbs/MMBTU. Table 3.2-3 of AP-42 (7/00) lists the total PM emissions from 4-stroke, rich-burn natural gas-fired engines to be 0.0194 lbs/MMBTU. Table 1.4-2 of AP-42 (7/98) lists the total PM emissions for natural gas-fired heaters to be 7.6 lb/MMft³ or about 0.0076 lb/MMBTU. The following table compares the applicable limits to expected PM emissions. The equipment at this facility is in compliance with the requirements of this subchapter.

Unit	Heat Input Capacity, MMBTUH	PM Emission Limitation, lb/MMBTU	PM Emission Rate, lb/MMBTU
P-CM-2322	8.3	0.60	0.0194
P-CM-2323	7.8	0.60	0.0194
P-CM-2324B	7.8	0.60	0.0194
P-CM-2325B	7.8	0.60	0.0194
P-CM-2819	7.8	0.60	0.0194
P-CM-4203R	5.1	0.60	0.0099
P-CM-2326	10.9	0.60	0.0194
P-CM-2327	10.9	0.60	0.0194
P-CM-2328	10.9	0.60	0.0194
P-RB-2	1.0	0.60	0.0076
P-HT-1	1.0	0.60	0.0076
P-HT-3	1.0	0.60	0.0076

Section 19-12 limits emissions of particulate matter from industrial processes and direct-fired fuel-burning equipment based on their process weight rates. Since there are no significant particulate emissions from the nonfuel-burning processes at the facility, compliance with the standard is assured without any special monitoring provisions.

OAC 252:100-25 (Visible Emissions and Particulates)

[Applicable]

No discharge of greater than 20% opacity is allowed except for short-term occurrences that consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. When burning natural gas there is very little possibility of exceeding these standards.

OAC 252:100-29 (Fugitive Dust)

[Applicable]

No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originated in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or to interfere with the maintenance of air quality standards. Under normal operating conditions, this facility has negligible potential to violate this requirement; therefore, it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds)

[Applicable]

Part 2, Section 31-7 limits the ambient air concentration of hydrogen sulfide (H_2S) emissions from any facility to 0.2 ppmv (24-hour average) at standard conditions which is equivalent to $283 \mu g/m^3$ (based on EPA standard conditions). Based on modeling conducted for the general permit for oil and gas facilities, facilities combusting natural gas with a maximum H_2S content of 162 ppmv, storing “sweet” crude oil/condensate, and with a dehydration unit and a single uncontrolled amine unit (still vent routed to the atmosphere) treating “sweet” (<4 ppmv H_2S) natural gas will be in compliance with the H_2S ambient air concentration limit.

Part 5, Section 31-25 limits sulfur dioxide emissions from new fuel-burning equipment (constructed after July 1, 1972). For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For fuel gas having a gross calorific value of 1,000 BTU/SCF, this limit corresponds to fuel sulfur content of 1,203 ppmv. The permit requires the use of gaseous fuel with sulfur content less than 162 ppmv to ensure compliance with Subchapter 31.

Part 5, Section 31-26(1) requires that H_2S contained in the waste gas stream from any petroleum or natural gas process equipment shall be reduced by 95% by removal or by being oxidized to SO_2 prior to being emitted to the ambient air. This requirement shall not apply if a facility’s emissions of H_2S do not exceed 0.3 lb/hr, two-hour average. Oxidation of the H_2S must be conducted in a system that assures at least a 95% reduction of the H_2S in the exhaust gases and that is equipped with an alarm system that signals a malfunction for all thermal devices used to control H_2S emissions from petroleum and natural gas processing facilities regulated under OAC 252:100-31-26. The permit will require compliance with all applicable requirements.

Part 5, Section 31-26(2) allows any gas sweetening unit to direct oxidation of H_2S to sulfur dioxide (SO_2), without sulfur recovery, when the exhaust gas will contain no more than 100 lb/hr SO_2 (2-hour average). Compliance with the 100 lb/hr can be demonstrated by establishing that the acid gas stream contains 0.54 long tons per day (LT/D) of sulfur (S) or less.

Compliance is demonstrated with the H_2S and SO_2 standards of this section by monitoring the pre-controlled H_2S emissions at the facility’s inlet once per calendar quarter. Inlet H_2S concentrations below 2.30 ppm at the plant capacity of 35 MMSCFD will ensure H_2S emissions are below the 0.3 lb/hr, two-hour average limit based on a mass balance. Therefore, the 95% waste gas stream reduction requirements of this section are not applicable. The permit requires the facility to limit emissions of H_2S to below 0.3 lb/hr based on a mass balance.

OAC 252:100-33 (Nitrogen Oxides)

[Not Applicable]

This subchapter limits new gas-fired fuel-burning equipment with rated heat input greater than or equal to 50 MMBTUH to emissions of 0.20 lbs of NO_x per MMBTU, three-hour average. There are no equipment items that exceed the 50 MMBTUH threshold.

OAC 252:100-35 (Carbon Monoxide)

[Not Applicable]

None of the following affected processes are located at this facility: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

OAC 252:100-37 (Volatile Organic Compounds) [Part 3 & 7 Applicable]

Part 3 requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. This affects condensate storage. The vapor pressure of glycol and lube oil tanks is less than 1.5 psia; therefore, Part 3 does not apply to those tanks. The condensate, slop oil, and methanol tanks have submerged fill pipes; therefore, comply with Part 3.

Part 5 limits the VOC content of coating used in coating lines or operations. This facility will not normally conduct coating or painting operations except for routine maintenance of the facility and equipment, which is exempt.

Part 7 requires fuel-burning equipment to be cleaned, operated, and maintained so as to minimize VOC emissions. Based on manufacturer's data and good engineering practice, the equipment must not be overloaded and temperature and available air must be sufficient to provide essentially complete combustion. The engines are designed to provide essentially complete combustion of organic materials.

Part 7 also regulates water separators that receive water containing more than 200 gallons per day of VOC. All access hatches and other openings are required to be closed and sealed. There is no oil-water separator on location.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable]

This subchapter regulates TAC that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a modification is approved by the Director. Since no AOC has been designated there are no specific requirements for this facility at this time.

OAC 252:100-43 (Testing, Monitoring, and Recordkeeping) [Applicable]

This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with

applicable requirements if the appropriate performance or compliance test or procedure had been performed.

The following Oklahoma Air Pollution Control Rules are not applicable to this facility:

OAC 252:100-11	Alternative Reduction	not eligible
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Feed & Grain Facility	not in source category
OAC 252:100-39	Nonattainment Areas	not in a subject area
OAC 252:100-47	Landfills	not type of source category

SECTION IX. FEDERAL REGULATIONS

PSD, 40 CFR Part 52

[Applicable]

Total existing potential emissions of NO_x and CO are above the major source threshold of 250 TPY. Emissions increases are below the PSD levels of significant emission rates. Any future projects at this facility must be evaluated in the context of PSD significance emission rates for an existing major source: 100 TPY CO, 40 TPY NO_x, 40 TPY SO₂, 15 TPY PM₁₀, 10 TPY PM_{2.5}, and 40 TPY VOC.

NSPS, 40 CFR Part 60

[Subparts JJJJ, KKK, and OOOOb Applicable]

Subpart Kb, Volatile Organic Liquid (VOL) Storage Vessels. This subpart regulates hydrocarbon storage tanks larger than 19,813 gallons capacity and built after July 23, 1984, and on or before October 4, 2023. There are no tanks larger than the threshold of applicability.

Subpart Kc, VOL Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023. There are no tanks larger than the threshold of applicability of 20,000 gallons.

Subpart GG, Stationary Gas Turbines. The compressors here are powered by reciprocating engines.

Subpart VV, Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry (SOCMI) for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006. The equipment is not in a SOCMI plant.

Subpart VVa, Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry (SOCMI) or Which Construction, Reconstruction, or Modification Commenced After November 7, 2006. The equipment is not in a SOCMI plant.

Subpart KKK, Equipment Leaks of VOC from Onshore Natural Gas Processing Plants for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011. This subpart regulates natural gas processing plants which were constructed, modified, or reconstructed after January 20, 1984, and prior to August 23, 2011. The dehydration unit was manufactured in 2007 and installed in 2021. The unit is therefore subject to Subpart KKK. All applicable requirements have been incorporated into the permit.

Subpart LLL, SO₂ Emissions From Onshore Natural Gas Processing for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011. This subpart affects sweetening units and sweetening units followed by sulfur recovery units that process natural gas. The amine unit at this facility only processes natural gas liquids (NGLs); therefore, this subpart is not applicable.

Subpart IIII, Stationary Compression Ignition Internal Combustion Engines. This subpart affects stationary compression ignition (CI) internal combustion engines (ICE) based on power and displacement ratings, depending on date of construction, beginning with those constructed after July 11, 2005. There are no compression ignition engines at this facility.

Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines (SI-ICE). This subpart promulgates emission standards for new SI engines ordered after June 12, 2006, that are manufactured after certain dates, and for SI engines modified or reconstructed after June 12, 2006. The specific emission standards (either in g/hp-hr or as a concentration limit) vary based on engine class, engine power rating, lean-burn or rich-burn, fuel type, duty (emergency or non-emergency), and manufacture date. Engine manufacturers are required to certify certain engines to meet the emission standards and may voluntarily certify other engines. An initial notification is required only for owners and operators of engines greater than 500 HP that are non-certified. All engines (except EU-CM-4203R and the new engines of Scenario 1 and Scenario 2) were manufactured prior to July 1, 2007, have not been modified or reconstructed, and are not subject to any requirements under subpart JJJJ. Engine EU-CM-4203R is subject to this subpart. New engines of both scenarios (EU-CM-2326, EU-CM-2327, and EU-CM-2328) will probably be manufactured after July 1, 2010. Therefore, these engines will be subject to this subpart and the emission limits shown in the following table.

**Emission Standards from Table 1, Subpart JJJJ, g/hp-hr (ppmvd @ 15%O₂)
For Non-Emergency SI Engines Burning Natural Gas**

Engine Type	Horsepower	Mfg. Date	NO_x	CO	VOC
4SLB/4SRB	≥ 500	7/1/2010	1.0 (82)	2.0 (270)	0.7 (60)

All applicable requirements have been incorporated into the permit.

Subpart OOOO, Crude Oil and Natural Gas Production Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015. This subpart affects the following:

1. Each gas well affected facility, which is a single natural gas well.
2. Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals.
3. Each reciprocating compressor affected facility, which is a single reciprocating compressor.
4. Each pneumatic controller affected facility, which is:
 - a. For the oil and natural gas production segments: a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 SCFH.
 - b. For natural gas processing plants: a single continuous bleed natural gas-driven pneumatic controller.
5. Each storage vessel affected facility, which is a single storage vessel, that contains crude oil, condensate, intermediate hydrocarbon liquids, or produced water that has the potential to emit more than 6 TPY.
6. The group of all equipment, except compressors, within a process unit is an affected facility.

7. Sweetening units located at onshore natural gas processing plants.

There are no affected gas wells or centrifugal compressors located at this facility.

All compressors associated with their respective engines at the facility were manufactured prior to August 23, 2011, or after September 18, 2015, have not been modified or reconstructed, during the applicability dates of this subpart and are not subject to this subpart.

No continuous bleed natural gas-driven pneumatic controllers were constructed, modified, or reconstructed during the applicable effective dates of the standard.

None of the storage vessels were constructed, modified, or reconstructed during the applicability dates, and are not subject to this subpart.

None of the process units were constructed, modified, or reconstructed during the applicable effective dates of the standard.

A sweetening unit means a process device that removes hydrogen sulfide and/or carbon dioxide from the sour natural gas stream. A sour natural gas stream is defined as containing greater than or equal to 0.25 grains sulfur per 100 standard cubic feet or 4 ppmv. There is an amine unit at the facility but it was constructed prior to August 23, 2011, it has not been modified or reconstructed during the applicable effective dates of the standard, and is not subject to the standards for sweetening units.

Subpart OOOOa, Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015, and on or Before December 6, 2022. This subpart regulates the following affected facilities:

1. Each well affected facility, which is a single well that conducts a well completion operation following hydraulic fracturing or refracturing.
2. Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals.
3. Each reciprocating compressor affected facility, which is a single reciprocating compressor.
4. Each pneumatic controller affected facility:
 - a. Each pneumatic controller affected facility not located at a natural gas processing plant, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 SCFH.
 - b. Each pneumatic controller affected facility located at a natural gas processing plant, which is a single continuous bleed natural gas-driven pneumatic controller.
5. Each storage vessel affected facility, which is a single storage vessel with the potential for VOC emissions equal to or greater than 6 TPY as determined according to §60.5365a(e).
6. The group of all equipment within a process unit located at an onshore natural gas processing plant is an affected facility.
7. Sweetening units.
8. Each pneumatic pump affected facility:

- a. For natural gas processing plants, each pneumatic pump affected facility, which is a single natural gas-driven diaphragm pump.
 - b. For well sites, each pneumatic pump affected facility, which is a single natural gas-driven diaphragm pump.
9. The collection of fugitive emissions components at a well site, as defined in §60.5430a, is an affected facility, except as provided in § 60.5365a(i)(2).
10. The collection of fugitive emissions components at a compressor station, as defined in § 60.5430a, is an affected facility.

All compressors associated with their respective engines at the facility were manufactured prior to September 18, 2015, or after December 6, 2022, have not been modified or reconstructed. Therefore, the compressors are not subject to this subpart.

The glycol dehydration unit is considered a process unit. The equipment that is located within this process unit was installed in 2021, but manufactured in 2007. The dehydration unit is not subject to this subpart.

All other potentially affected equipment at this facility was constructed before the effective date of this subpart, have not been modified or reconstructed, and therefore, is not subject to this subpart.

Subpart OOOOb, Crude Oil and Natural Gas Facilities for which construction, modification, or reconstruction commenced after December 6, 2022. This subpart affects the following onshore affected facilities:

- (a) Each well affected facility, which is a single well drilled for the purpose of producing oil or natural gas.
- (b) Each centrifugal compressor affected facility, which is a single centrifugal compressor.
- (c) Each reciprocating compressor affected facility, which is a single reciprocating compressor.
- (d) Each process controller affected facility, which is the collection of natural gas-driven process controllers at a well site, centralized production facility, onshore natural gas processing plant, or a compressor station.
- (e) Each storage vessel affected facility, which is a tank battery that has the potential for emissions of 6 TPY of VOC or 20 TPY of methane.
- (f) Each process unit equipment affected facility, which is the group of all equipment within a process unit at an onshore natural gas processing plant is an affected facility.
- (g) Each sweetening unit affected facility.
- (h) Each pump affected facility, which is the collection of natural gas-driven pumps at a well site, centralized production facility, onshore natural gas processing plant, or a compressor station.
- (i) Each fugitive emissions components affected facility, which is the collection of fugitive emissions components at a well site, centralized production facility, or a compressor station.

Storage vessels constructed, modified, or reconstructed after August 23, 2011, with VOC emissions equal to or greater than 6 TPY must reduce VOC emissions by 95.0 % or greater. TK-2, TK-3, TK-4, and TK-5 were installed in 2025. The post VRU emissions from the four storage

tanks are greater than applicable threshold of 6.0 TPY of VOC and 20 TPY for methane. The tank battery is therefore subject to NSPS Subpart OOOOb.

The compressors associated with new engines of both scenarios (CM-2326, CM-2327, and CM-2328) are anticipated to be manufactured after December 6, 2022, and will be subject to this subpart.

The proposed changes are anticipated to constitute a modification to the inlet compression process unit. This will trigger monitoring requirements of the fugitive components related to this process unit at the facility. All applicable requirements have been included in the permit.

At the time of permit issuance, NSPS Subpart OOOOb is currently under review by EPA. If federal legislation, rulemaking, or a court ruling invalidates all, or part of, OOOOb, the invalidated portions will no longer be applicable through this permit. In the interim, DEQ will exercise enforcement discretion as appropriate.

NESHAP, 40 CFR Part 61

[Not Applicable]

There are no emissions of any of the regulated pollutants: arsenic, asbestos, benzene, beryllium, coke oven emissions, mercury, radionuclides, or vinyl chloride except for trace amounts of benzene. Subpart J, Equipment Leaks of Benzene, concerns only process streams which contain more than 10% benzene by weight. Analysis of Oklahoma natural gas indicates a maximum benzene content of less than 1%.

NESHAP, 40 CFR Part 63

[Subparts HH and ZZZZ Applicable]

Subpart HH, Oil and Natural Gas Production Facilities. This subpart applies to affected emission points that are located at facilities that are major and area sources of HAPs and either process, upgrade, or store hydrocarbons prior to the point of custody transfer or prior to which the natural gas enters the natural gas transmission and storage source category. The facility is an “area” source of HAPs. TEG dehydration units with an actual annual average flowrate of less than 3 MMSCFD or less than 1 TPY of benzene emissions are exempt from control standards, but are subject to recordkeeping. GRI-GLYCalc Version 3.0 or higher may be used to show that benzene emissions are less than 1 TPY, or a direct measurement can be made. Since benzene emissions are below 1 TPY, only the recordkeeping requirement is applicable.

Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE). This subpart affects RICE that are located at area and major sources of HAP emissions. New and reconstructed engines (after June 12, 2006) located at area sources must meet the requirements of Subpart ZZZZ by complying with either 40 CFR Part 60 Subpart IIII (for CI engines) or 40 CFR Part 60 Subpart JJJJ (for SI engines). The Caterpillar G3508B ULB (EU-CM-4203R) and the Waukesha L7042GSI S5 (EU-CM-2326 through EU-CM-2328) of Scenario 1 and Caterpillar G3516B (EU-CM-2326 through EU-CM-2328) of Scenario 2 natural gas-fired compressor engines were/will be manufactured and constructed after June 12, 2006, and are considered new engines. New engines must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart JJJJ. No further requirements apply for such engines under this part. These engines will be required to comply with NSPS, Subpart JJJJ to meet the compliance requirements of NESHAP, Subpart ZZZZ.

All the engines in EUG-3A were constructed prior to June 12, 2006, and are “existing” affected sources. Affected existing stationary RICE are subject to emission limitations and operating limitations unless they meet the definition of remote stationary RICE. A summary of the requirements for the SI RICE located at this facility are shown below.

Engine Category	
Remote	Requirements ¹
Existing Non-Emergency, Non-Black Start, remote 4SRB & 4SLB HP > 500-hp	Change oil and filter every 2,160 hours of operation or within 1 year + 30 days of the previous change, whichever comes first ² ;
	Inspect spark plugs every 2,160 hours of operation or within 1 year + 30 days of the previous change, whichever comes first, and replace as necessary; and
	Inspect all hoses and belts every 2,160 hours of operation or within 1 year + 30 days of the previous change, whichever comes first, and replace as necessary.

- (1) During periods of startup, you must minimize the engine’s time spent at idle and minimize the engine’s startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.
- (2) Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement.

Onshore remote stationary RICE means stationary RICE meeting any of the following criteria:

1. Stationary RICE located on a pipeline segment that meets both of the following criteria:
 - i. A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.
 - ii. The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.
2. Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

Based on information submitted by the applicant, this facility and the engines within the facility are considered remote. All applicable requirements have been incorporated into the permit.

CAM, 40 CFR Part 64

[Applicable]

Compliance Assurance Monitoring (CAM) applies to any pollutant specific emission unit at a major source that is required to obtain a Title V permit, if it meets all of the following criteria:

- (1) It is subject to an emission limit or standard for an applicable regulated air pollutant
- (2) It uses a control device to achieve compliance with the applicable emission limit or standard

- (3) It has potential emissions, prior to the control device, of the applicable regulated air pollutant greater than the major source thresholds

Engines (EU-CM-2819, EU-CM-2323, CM-2324B and EU-CM-2325B) have uncontrolled emissions of NO_x and CO above 100 TPY and are subject to CAM. EU-CM-2325B has been subject to CAM since 2003-175-TVR. The glycol dehydrator (DEHY-1) has potential emissions prior to the control device greater than 100 TPY and therefore is subject to CAM. The applicant submitted CAM plans for applicable engines and the dehydrator with the Permit Application No. 2020-0500-TVR4 issued on March 31, 2022. All applicable requirements of the CAM plans were incorporated into that permit renewal. CAM applicability to the new units will be addressed through the Title V process.

Chemical Accident Prevention Provisions, 40 CFR Part 68

[Not Applicable]

This facility will not process or store more than the threshold quantity of any regulated substance (Section 112r of the Clean Air Act 1990 Amendments). More information on this federal program is available on the web page: www.epa.gov/rmp.

Stratospheric Ozone Protection, 40 CFR Part 82

[Subpart A and F Applicable]

These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).

Subpart A identifies ozone-depleting substances and divides them into two classes. Class I controlled substances are divided into seven groups; the chemicals typically used by the manufacturing industry include carbon tetrachloride (Class I, Group IV) and methyl chloroform (Class I, Group V). A complete phase-out of production of Class I substances is required by January 1, 2000 (January 1, 2002, for methyl chloroform). Class II chemicals, which are hydrochlorofluorocarbons (HCFCs), are generally seen as interim substitutes for Class I CFCs. Class II substances consist of 33 HCFCs. A complete phase-out of Class II substances, scheduled in phases starting by 2002, is required by January 1, 2030.

Subpart F requires that any persons servicing, maintaining, or repairing appliances except for motor vehicle air conditioners; persons disposing of appliances, including motor vehicle air conditioners; refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment comply with the standards for recycling and emissions reduction.

The standard conditions of the permit address the requirements specified at § 82.156 for persons opening appliances for maintenance, service, repair, or disposal; § 82.158 for equipment used during the maintenance, service, repair, or disposal of appliances; § 82.161 for certification by an approved technician certification program of persons performing maintenance, service, repair, or

disposal of appliances; § 82.166 for recordkeeping; § 82.158 for leak repair requirements; and § 82.166 for refrigerant purchase records for appliances normally containing 50 or more pounds of refrigerant.

SECTION XI. TIER CLASSIFICATION, PUBLIC AND EPA REVIEW

TIER CLASSIFICATION

Mustang is requesting to incorporate the LDAR monitoring requirements of NSPS Subpart OOOOb into the permit. The existing inlet compression process unit is currently subject to LDAR monitoring under NSPS Subpart OOOOa. The addition of inlet compression will be considered a modification to the process unit and therefore a significant change to the existing monitoring requirements. Mustang is also requesting to update the emissions limits for existing engines CM-2322, CM-2323, CM-2424B, and CM-2819 to avoid exceeding PSD thresholds which is taking a limit to avoid an otherwise applicable limit. The requested changes are therefore considered “significant modifications” and subject to **Tier II** permitting process. The applicant requested the “Traditional NSR process.” Public review of the application and the draft permit are required.

LANDOWNER AFFIDAVIT

The permittee has submitted an affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certifies that the applicant owns the land required to accomplish the permitted purpose. Information on all permit actions is available for review by the public on the Air Quality section of the DEQ web page at <https://oklahoma.gov/deq.html>.

PUBLIC REVIEW

The applicant published the “Notice of Filing a Tier II Application” on December 4, 2024, in the *Country Connection News*, a daily local newspaper in the Caddo County, Oklahoma. The notice stated that the application was available for public review at the Carnegie Public Library or at the Air Quality Division’s main office at 707 N. Robinson, Oklahoma City, OK 73101.

The applicant will publish a “Notice of Tier II Draft Permit” in a local newspaper in Caddo County, Oklahoma. The notice will state that the draft permit will be available for public review at a local Public Library and at the Air Quality Division’s main office at 707 N. Robinson, Oklahoma City, OK 73101. The notice will also state that the draft permit will be available for public review on DEQ web page at: <https://oklahoma.gov/deq.html>.

NEIGHBORING STATES

This facility is not located within 50 miles of the border of Oklahoma and any other state.

TRIBAL NATIONS

Tribal Nations will be notified of the draft permit.

FEE PAID

Part 70 construction permit application fee of \$5,000 has been paid on January 13, 2025.

SECTION XII. SUMMARY

This facility has demonstrated the ability to comply with all Air Quality rules and regulations. Ambient air quality standards are not threatened at this site. There are no active Air Quality compliance or enforcement issues concerning this facility. Issuance of the permit is recommended, contingent on public and Tribal review.

DRAFT

PERMIT TO CONSTRUCT AIR POLLUTION CONTROL FACILITY SPECIFIC CONDITIONS

**Mustang Gas Products LLC
Binger Gas Plant**

Permit No. 2020-0500-C (M-2)

The permittee is authorized to construct in conformity with the specifications submitted to Air Quality on October 25, 2024. The Evaluation Memorandum dated October 21, 2025, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein:

1. Points of emissions and emissions limitations for each point. [OAC 252:100-8-6(a)]

EUG-3A: Permitted Engines (Not Subject to NSPS Subpart JJJJ)

EU	Point	Description	HP
EU-CM-2819	P-CM-2819	Waukesha L7042GSI w/NSCR	1,232
EU-CM-2322	P-CM-2322	White-Superior 12G825	1,200
EU-CM-2323	P-CM-2323	Waukesha L7042GSI w/NSCR	1,232
EU-CM-2324B	P-CM-2324B	Waukesha L7042GSI w/NSCR	1,232
EU-CM-2325B	P-CM-2325B	Waukesha L7042GSI w/NSCR	1,232

EU	NO _x		CO		VOC*	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-2819	7.20	31.53	9.91	43.42	1.09	4.76
EU-CM-2322	42.33	185.40	42.33	185.40	5.29	23.18
EU-CM-2323	7.20	31.53	9.91	43.42	1.09	4.76
EU-CM-2324B	7.20	31.53	9.91	43.42	2.72	11.90
EU-CM-2325B	5.43	23.78	8.15	35.70	1.09	4.76

* VOC includes formaldehyde.

- (a) CM-2819, CM-2323, CM-2324B, and CM-2325B shall be operated with an automatic air/fuel ratio controller (AFRC) and with exhaust gases passing through a properly functioning NSCR catalyst.
- (b) CM-2322 shall be operated with an AFRC.
- (c) CM-2819, CM-2322, CM-2323, CM-2324B, and CM-2325B are subject to NESHAP Subpart ZZZZ and shall comply with all applicable requirements in Specific Condition No. 14.

EUG-3B Permitted Engines (Subject to NSPS Subpart JJJJ) (Scenario 1)

EU	Point	Description	HP
EU-CM-4203R	P-CM-4203R	Caterpillar G3508B ULB**	690
EU-CM-2326	P-CM-2326	Waukesha L7042GSI S5*	1,500

EU	Point	Description	HP
EU-CM-2327	P-CM-2327	Waukesha L7042GSI S5*	1,500
EU-CM-2328	P-CM-2328	Waukesha L7042GSI S5*	1,500

* 4S-RB with NSCR catalyst and AFRC.

** 4-stroke lean burn (4S-LB) with oxidation catalyst and AFRC.

EU	NO _x		CO		VOC*	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-4203R	1.52	6.66	3.04	13.33	1.45	6.33
EU-CM-2326	3.31	14.48	6.61	28.97	2.48	10.86
EU-CM-2327	3.31	14.48	6.61	28.97	2.48	10.86
EU-CM-2328	3.31	14.48	6.61	28.97	2.48	10.86

* VOC includes formaldehyde.

- CM-4203R shall be operated with an AFRC and with exhaust gases passing through a properly functioning oxidation catalyst.
- CM-2326, CM-2327, and CM-2328 shall be operated with an AFRC and with exhaust gases passing through a properly functioning NSCR.
- CM-4203R, CM-2326, CM-2327, and CM-2328 are subject to NSPS Subpart JJJJ and NESHAP Subpart ZZZZ and shall comply with all applicable requirements in Specific Conditions No. 12 and 14, respectively.

EUG-3BB Permitted Engines (Subject to NSPS Subpart JJJJ) (Scenario 2)

EU	Point	Description	HP
EU-CM-4203R	P-CM-4203R	Caterpillar G3508B ULB*	690
EU-CM-2326	P-CM-2326	Caterpillar G3516B*	1,380
EU-CM-2327	P-CM-2327	Caterpillar G3516B*	1,380
EU-CM-2328	P-CM-2328	Caterpillar G3516B*	1,380

* 4S-LB with oxidation catalyst and AFRC.

EU	NO _x		CO		VOC*		Formaldehyde	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-4203R	1.52	6.66	3.04	13.33	1.45	6.33	0.380	1.67
EU-CM-2326	3.04	13.33	6.08	26.65	2.46	10.79	0.335	1.47
EU-CM-2327	3.04	13.33	6.08	26.65	2.46	10.79	0.335	1.47
EU-CM-2328	3.04	13.33	6.08	26.65	2.46	10.79	0.335	1.47

* VOC includes formaldehyde.

- CM-4203R, CM-2326, CM-2327, and CM-2328 shall be operated with an AFRC and with exhaust gases passing through a properly functioning oxidation catalyst.
- CM-4203R, CM-2326, CM-2327, and CM-2328 are subject to NSPS Subpart JJJJ and NESHAP Subpart ZZZZ and shall comply with all applicable requirements in Specific Conditions No. 12 and 14, respectively.

EUG-3C: Compressors Associated with Engines EUG-3A and 3B (Scenario 1)

Compressor ID	Associated Engines	Description	Mfg./Const. Date	Applicable NSPS Subpart
EU-CM-2819	P-CM-2819	Ingersol RDS compressor	1971	N/A
EU-CM-2322	P-CM-2322	White W-64 compressor	1975	N/A
EU-CM-2323	P-CM-2323	Ingersol RDS compressor	1974	N/A
EU-CM-2324B	P-CM-2324B	Ingersol RDS compressor	1975	N/A
EU-CM-2325B	P-CM-2325B	Ingersol RDS compressor	1976	N/A
EU-CM-4203R	P-CM-4203R	Ariel JGE/2 compressor	10/2004	N/A
EU-CM-2326	P-CM-2326	(TBD) compressor	TBD	TBD ⁽¹⁾
EU-CM-2327	P-CM-2327	(TBD) compressor	TBD	TBD ⁽¹⁾
EU-CM-2328	P-CM-2328	(TBD) compressor	TBD	TBD ⁽¹⁾

⁽¹⁾ The compressors are anticipated to be subject to NSPS Subpart OOOOb and shall comply with all applicable requirements under this subpart as required by Specific Condition No. 15.

EUG-3C: Compressors Associated with Engines EUG-3AA and 3BB (Scenario 2)

Compressor ID	Associated Engines	Description	Mfg./Const. Date	Applicable NSPS Subpart
EU-CM-2819	P-CM-2819	Ingersol RDS compressor	1971	N/A
EU-CM-2322	P-CM-2322	White W-64 compressor	1975	N/A
EU-CM-2323	P-CM-2323	Ingersol RDS compressor	1974	N/A
EU-CM-2324B	P-CM-2324B	Ingersol RDS compressor	1975	N/A
EU-CM-2325B	P-CM-2325B	Ingersol RDS compressor	1976	N/A
EU-CM-4203R	P-CM-4203R	Ariel JGE/2 compressor	10/2004	N/A
EU-CM-2326	P-CM-2326	(TBD) compressor	TBD	TBD ⁽¹⁾
EU-CM-2327	P-CM-2327	(TBD) compressor	TBD	TBD ⁽¹⁾
EU-CM-2328	P-CM-2328	(TBD) compressor	TBD	TBD ⁽¹⁾

⁽¹⁾ The compressors are anticipated to be subject to NSPS Subpart OOOOb and shall comply with all applicable requirements under this subpart as required by Specific Condition No. 15.

EUG-4A Glycol Dehydrator Vent

EU	Point	Description	VOC Emissions		HAP Emissions
			lb/hr	TPY	TPY
DEHY-1	DEHY-1	Glycol Dehydrator Still Vent/Flash Tank	1.91	8.38	1.31

- The lean glycol recirculation rate of the glycol dehydration unit shall not exceed 3.5 gallons per minute.
- The natural gas throughput of the glycol dehydration unit shall not exceed 35 MMSCFD based on a monthly average.
- The glycol dehydration unit shall be equipped with a condenser. Off gases from the still vent shall be processed by a condenser and the uncondensed gasses shall be sent to the reboiler firebox when it is firing and to the atmosphere when not firing with an overall control efficiency of 50%.

- (d) The dehydration unit shall be equipped with a flash tank on the rich glycol stream. Off gasses from the flash tank shall be sent to the facility inlet.
- (e) Records of benzene emissions shall be kept per 40 CFR Part 63, Subpart HH in accordance with Specific Condition No. 13.
- (f) The permittee shall monitor and record the lean glycol circulation rate from the dehydrator at least once a month (for months' the TEG unit is in operation). When three consecutive monitoring events show no exceedance of the limit, the frequency may be reduced to quarterly. Upon any showing of non-compliance, the monitoring and recordkeeping frequency shall revert to monthly. With each inspection the lean glycol circulation rate shall be recorded as follows:

Circulation rate, as found (gal/min, strokes/min)	_____
Circulation rate, as left (gal/min, strokes/min)	_____
Date of inspection	_____
Inspected by	_____

The requirement to monitor and record glycol circulation rate shall not apply if the rated pump capacity does not exceed 3.5 GPM. If so, the manufacturer's rating or the performance data for the model of pump that verifies the maximum pump rate at any operational conditions shall be maintained and available for inspection.

EUG-4B Glycol Reboiler

Glycol Reboiler emissions are insignificant and do not have a specific limitation

EU	Point	Description	MMBTUH
RB-2	RB-2	Glycol Reboiler	1.0

EUG-5 Regeneration Heater

Emissions from the regeneration heater are insignificant and do not have a specific limitation.

EU	Point	Description	MMBTUH
EU-HT-1	P-HT-1	Mole Sieve Regeneration Heater	1.0

EUG-6A Condensate Storage Tanks

EU	Point	Description	Capacity, Gallons	Throughputs, Gallons/Yr	VOC Emissions, TPY
TK-2	TK-2	Condensate Tank	12,600	383,250	2.22
TK-3	TK-3	Condensate Tank	12,600	383,250	2.22
TK-4	TK-4	Condensate Tank	12,600	383,250	2.22
TK-5	TK-5	Condensate Tank	12,600	383,250	2.22

- (a) The condensate storage tanks shall be controlled by a properly functioning VRU.
- (b) The condensate tanks shall be equipped with submerged fill pipes.

- (c) The condensate tanks are subject to NSPS Subpart OOOOb and shall comply with all applicable regulations as specified in SC #15.

EUG-6B Insignificant Storage Tanks

Emissions from the storage tanks are insignificant and do not have a specific limitation.

EU	Point	Description	Capacity, gallons
EU-TK-1	P-TK-1	Slop Oil/Drip Oil	4,200
EU-TK-6	P-TK-6	Slop Oil Tank	8,820
EU-TK-7	P-TK-7	Glycol	118
EU-TK-8	P-TK-8	Lube Oil Tank	660
EU-TK-9	P-TK-9	Lube Oil Tank	660
EU-TK-10	P-TK-10	Lube Oil Tank	660
EU-TK-11	P-TK-11	Lube Oil Tank	660
EU-TK-12	P-TK-12	Methanol Tank	576
EU-TK-13	P-TK-13	Methanol Tank	600
EU-TK-14	P-TK-14	Lube Oil Tank	6,000
EU-TK-15	P-TK-15	Waste Tank	100
EU-TK-16	P-TK-16	Antifreeze	660
EU-TK-17	P-TK-17	Antifreeze	660
EU-TK-18	P-TK-18	Deionized Water	2,500
EU-TK-19	P-TK-19	Amine	525
EU-TK-20	P-TK-20	Drip Waste Recovery	250
EU-TK-21	P-TK-21	Propane	1,000
EU-TK-22	P-TK-22	Glycol Storage Tank	500
EU-TK-23	P-TK-23	Glycol Storage Tank	600

EUG-7A OOOOb Process Piping Fugitives

Component	Service	Components #
Valves	Gas/Vapor	340
Connectors	Gas/Vapor	1,810
Flanges`	Gas/Vapor	360
Compressor Seals	Gas/Vapor	8
Relief Valves	Gas/Vapor	15
Valves	Light Liquid	320
Connectors	Light Liquid	1,895
Flanges`	Light Liquid	223
Pump Seals	Light Liquid	6

EUG 8 Equipment Blowdowns

Emissions from the atmospheric vent are subject to the following limitations.

EU	Point	Equipment	MMSCF/YR	VOC Emissions (TPY)
ATMV-1	ATMV-1	Atmospheric Vent	105	3.96

EUG-9 Amine Unit

Amine Unit Vent

EU	Point	Description	VOC Emissions, TPY
AMINE	AMINE	Amine Unit Vent	15.09

Emissions of H₂S from the amine unit shall not exceed 0.3 lb/hr, two-hour average. Also, the oxides of sulfur, expressed as sulfur, from the acid gas stream of the plant shall be 0.54 long ton/day (LT/D) or less. Compliance with the hydrogen sulfide and oxides of sulfur standards of OAC 252:100-31-26 shall be demonstrated through one of the following options [either (a) or (b) below]:

- (a) Monitoring pre-control H₂S emissions:
 - (i) Inlet H₂S concentration shall not exceed 2.30 ppm. At a plant capacity of 35 MMSCFD, assuming an outlet H₂S concentration of “0” an inlet concentration of 2.30 will keep the H₂S emissions below the 0.3 lb/hr limit.
 - (ii) Compliance shall be demonstrated once per calendar quarter. The permittee shall use stain tubes (or an equivalent method) with a first scale mark no larger than 1 ppmv and a maximum measurement concentration of 15 ppmv or less. If an equivalent method is used, it must satisfy the same requirements for scale and maximum concentration.
- (b) Monitoring pre-control H₂S emissions if inlet H₂S is shown to exceed 2.30 ppm:
 - (i) Monitor the facility inlet flowrate continuously with an alarm set point as calculated below: [OAC 252:100-31-26]

$$Q_{\text{inlet,max}} \text{ MMSCFD} = \frac{(380 \text{ ft}^3/\text{lbmol})(24 \text{ hr/day})(0.3 \text{ H}_2\text{S lb/hr})}{(C_{\text{inlet}} - C_{\text{outlet}}, \text{ ppmv})(34 \text{ lb H}_2\text{S/lbmol})}$$

- (ii) Q_{inlet} will be evaluated on a two-hour rolling average,
- (iii) The calculations shall be based on quarterly tested H₂S concentration, measured at the following locations: (1) plant inlet gas streams, and (2) plant outlet gas stream, and the daily average inlet gas flow rate for that month. C_{inlet} in the above equation will be updated as monitoring is conducted each quarter.
- (iv) The permittee shall use stain tubes (or an equivalent method) with a first scale mark no larger than 1 ppmv and a maximum measurement concentration of 15 ppmv or less. If an equivalent method is used, it must satisfy the same requirements for scale and maximum concentration. The permittee may assume outlet concentration is 0 ppmw. Testing shall be conducted each calendar quarter.

Emissions from the Amine Reboiler are insignificant and do not have a specific limitation.

Amine Reboiler

EU	Point	Description	MMBTUH
HT-3	HT-3	Amine Reboiler	1.0

EUG 10 Condensate Loading

Emissions from the condensate loading operation are insignificant and do not have a specific limitation.

EU	Point	Equipment	Volume, bbl/yr
TL-1	TL-1	Condensate Loading	36,500

2. The fuel-burning equipment shall be fired with pipeline grade natural gas or other gaseous fuel with a sulfur content less than 162 ppmv. Compliance can be shown by the following methods: for pipeline grade natural gas, a current gas company bill; for other gaseous fuel, a current lab analysis, stain-tube analysis, gas contract, tariff sheet, or other approved methods. Compliance shall be demonstrated at least once in every calendar year. [OAC 252:100-31]
3. At least once per quarter, the facility shall conduct an analysis of the hydrogen sulfide (H₂S) content of the natural gas at the inlet of the plant. [OAC 252:100-43]
4. The permittee shall be authorized to operate this facility continuously (24 hours per day, every day of the year). [OAC 252:100-8-6(a)]
5. Each engine at the facility shall have a permanent identification plate attached which shows the make, model number, and serial number. [OAC 252:100-43]
6. The permittee shall conduct an initial test of NO_x and CO emissions from any engine listed in Specific Condition No. 1 or any replacement engine; other than (1) an Emergency Use Engine (i.e., any engine that drives a generator, firewater pump, or other emergency use equipment, and operates no more than 500 hours per year), or (2) any engine equal to or less than 250 horsepower (hp). The initial test must be performed within 180 days of engine startup. Testing shall be conducted using EPA reference methods, if applicable, or a portable analyzer in accordance with a protocol meeting the requirements of the latest AQD "Portable Analyzer Guidance" document, or an equivalent method approved by AQD.

At least twice per calendar year, the permittee shall conduct tests of NO_x and CO emissions from any controlled engine greater than 250 hp with emission limits and any uncontrolled 4SRB engine greater than 500 hp with emission limits. Testing shall be conducted using EPA reference methods, if applicable, or a portable analyzer in accordance with a protocol meeting the requirements of the latest AQD "Portable Analyzer Guidance" document, or an equivalent method approved by AQD. Testing is required for any controlled engine greater than 250 hp with emission limits and any uncontrolled 4SRB engine greater than 500 hp with emission limits that runs for more than 440 hours during a semi-annual period. Each semi-annual test shall be separated by at least 120 days. In the first year of operation, any engine started after

March 31st only requires one test regardless of hours operated. The initial test may be counted as the first semi-annual test of an engine. [OAC 252:100-43]

7. For Scenario 2, the permittee shall demonstrate compliance with the formaldehyde limits using the following schedule and test methodology: [OAC 525:100-43]

(a) Conduct an initial performance test for formaldehyde of each engine of Scenario 2 (CM-2326, CM-2327, and CM-2328) within 180 days of each engine's initial startup date or issuance of this permit. Subsequent performance testing for formaldehyde shall be conducted every 8,760 hours or 3 years, whichever comes first, thereafter. The formaldehyde test shall be conducted using promulgated EPA reference methods or an equivalent method approved by AQD. Performance testing by the permittee shall use the following test methods as specified in 40 CFR Part 60. [OAC 252:100-43]

Method 1:	Sample and Velocity Traverses for Stationary Sources or 1A.
Method 2:	Determination of Stack Gas Velocity and Volumetric Flow Rate or 2C.
Method 3:	Gas Analysis for the Determination of Dry Molecular Weight or 3A, 3B, or ASTM D6522-00.
Method 4:	Determination of Moisture Content in Stack Gases or ASTM D6348-03.
Method 320:	Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared Spectroscopy or
Method 323:	Measurement of Formaldehyde Emissions from Natural Gas-Fired Stationary Sources – Acetyl Acetone Derivatization Method

(b) A copy of the test plan shall be provided to AQD at least 30 days prior to each test date.

(c) Performance testing shall be conducted while the pollution control device is operating within representative condition at which operating permit authorization will be sought.

8. Compliance with the CO emission limits for the engines (except for scenario 2) in this permit is deemed compliance with the formaldehyde emission limits. This permit requires periodic testing of CO emissions from the engines (except for CM-2326, CM-2327, and CM-2328) of scenario 2) to demonstrate compliance with the formaldehyde limits.
9. Replacement of any equipment with emission limits specified in this permit allowed under OAC 252:100-8-6 (f)(2), provided the owner or operator notifies the DEQ in writing at least seven (7) days in advance of the proposed change. Installation of an "affected facility," "affected source," or "new source" as those terms are defined in 40 CFR Section 60.2, 40 CFR Section 63.2, and 40 CFR Section 61.02, respectively, that is subject to an emission standard, equipment standard, work practice standard or recordkeeping requirement in a federal NSPS (40 CFR Part 60) or a federal NESHAP (40 CFR Parts 61 and 63) shall comply with all applicable requirements.
10. The permittee shall maintain a record of make, model, serial number, and emission rates (lbs/hr and TPY), for any replacement engines. [OAC 252:100-8-6 (a)(3)(A)]

11. When periodic compliance testing shows engine exhaust emissions in excess of the lb/hr limits in Specific Condition Number 1, the permittee shall comply with the provisions of OAC 252:100-9. [OAC 252:100-9]
12. The permittee shall comply with the Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants NSPS Subpart KKK, for each of the affected facilities located on-site. [40 CFR §§ 60.630 to 60.636]
 - (a) The owner operator shall comply with the requirements of §§ 60.482-1(a), (b), and (d) and § 60.482-2 through § 60.482-10 except as provided in § 60.333 [§ 60.632(a)]
 - (i) The operator shall demonstrate compliance with §§ 60.482-1 to 60.482-10 for all affected equipment within 180 days of initial startup which shall be determined by review of records, reports, performance test results, and inspection using methods and procedures specified in § 60.485 unless the equipment is in vacuum service and is identified as required by § 60.486(e)(5). [§ 60.482-1(a), (b), & (d)]
 - (ii) The owner operator shall comply with the monitoring, inspection, and repair requirements, for pumps in light liquid service, of §§ 60.482-2(a), (b), and (c) except as provided in §§ 60.482-2(d), (e), and (f).
 - (iii) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in § 60.632(c), § 60.633(f), § 60.482-1(c), § 60.482-3(h), and § 60.482-3(i). [§ 60.482-3(a)]
 - (A) Each compressor seal system shall comply with the requirements of §§ 60.482-3(b).
 - (B) Each barrier fluid system shall be equipped with a sensor as required by § 60.482-3(d) that is monitored or equipped with an alarm as required by § 60.482-3(e) and repaired as required by §§ 60.482-3(f) and (g).
 - (iv) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of § 60.14 or § 60.15 is exempt from §§ 60.482(a), (b), (c), (d), (e), and (h) , provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of §§ 60.482-3(a) through (e) and (h). [§ 60.482-3(j)]
 - (v) The owner operator shall comply with the operation and monitoring requirements, for pressure relief devices in gas/vapor service, of §§ 60.482-4(a) and (b) except as provided in § 60.482-4(c) and § 60.633(b).
 - (vi) Sampling and connection systems are exempt from the requirements of § 60.482-5. [§ 60.633(c)]
 - (vii) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in § 60.632(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. When a double block-and-bleed system is being used, the bleed valve or line may remain open

- during operations that require venting the line between the block valves but shall be closed at all other times. [§ 60.482-6]
- (viii) The owner operator shall comply with the monitoring, inspection, and repair requirements, for valves in gas/vapor service and light liquid service, of §§ 60.482-7(b) through (e), except as provided in §§ 60.633(d), 60.482-7(f), (g), and (h), §§ 60.483-1, 60.483-2, and 60.482-1(c). [§ 60.482-7(a)]
- (ix) The owner operator shall comply with the monitoring and repair requirements, for pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors, of §§ 60.482-8(a) through (d). [§ 60.482-8]
- (x) Delay of repair of equipment is allowed if it meets one of the requirements of §§ 60.482-9(a) through (e).
- (xi) The owner or operators using a closed vent system and control device to comply with these provisions shall comply with the design, operation, monitoring and other requirements of 60.482-10(b) through (g). [§ 60.482-10(a)]
- (b) An owner or operator may elect to comply with the alternative requirements for valves of §§ 60.483-1 and 60.483-2. [§ 60.632(b) & § 60.482-1(b)]
- (c) An owner or operator may apply to the Administrator for permission to use an alternative means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to that achieved by the controls required in NSPS Subpart KKK. In doing so, the owner or operator shall comply with requirements of § 60.634. [§ 60.632(c)]
- (d) Each owner or operator subject to the provisions of NSPS Subpart KKK shall comply with the test method and procedures of § 60.485 except as provided in §§ 60.632(f) and 60.633(h). [§ 60.632(d)]
- (e) Each owner or operator subject to the provisions of NSPS Subpart KKK shall comply with the recordkeeping requirements of § 60.486 and the reporting requirements of § 60.487 except as provided in §§ 60.633, 60.635, and 60.636. [§ 60.632(e)]
- (f) Each owner or operator subject to the provisions of NSPS Subpart KKK shall comply with the recordkeeping requirements of §§ 60.635(b) and (c) in addition to the requirements of § 60.486. [§ 60.635(a)]
- (g) Each owner or operator subject to the provisions of NSPS Subpart KKK shall comply with the and the reporting requirements of §§ 60.636(b) and (c) in addition to the requirements of § 60.487. [§ 60.636(a)]
13. The permittee shall comply with all applicable requirements of NSPS, Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines, for each affected facility including but not limited to: [40 CFR §§60.4230 to 60.4248]
- (a) § 60.4230: Am I subject to this subpart?
- (b) § 60.4231: What emission standards must I meet if I am a manufacturer of stationary SI internal combustion engines?
- (c) § 60.4232: How long must my engines meet the emissions standards if I am a manufacturer of stationary SI internal combustion engines?
- (d) § 60.4233: What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

- (e) § 60.4234: How long must I meet the emissions standards if I am an owner or operator of a stationary SI internal combustion engine?
- (f) § 60.4235: What fuel requirements must I meet if I am an owner or operator of a stationary SI internal combustion engine?
- (g) § 60.4236: What is the deadline for importing or installing stationary SI ICE produced in the previous model year?
- (h) § 60.4237: What are the monitoring requirements if I am an owner or operator of a stationary SI internal combustion engine?
- (i) § 60.4238: What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines ≤ 19 KW (25 HP).
- (j) § 60.4239: What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines ≥ 19 KW (25 HP) that use gasoline?
- (k) § 60.4240: What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines ≥ 19 KW (25 HP) that use LPG?
- (l) § 60.4241: What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines participating in the voluntary certification program?
- (m) § 60.4242: What other requirement must I meet if I am a manufacturer of stationary SI internal combustion engines?
- (n) § 60.4243: What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?
- (o) § 60.4244: What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?
- (p) § 60.4245: What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?
- (q) § 60.4246: What parts of the General Provisions apply to me?
- (r) § 60.4247: What parts of the mobile source provisions apply to me if I am a manufacturer of stationary SI internal combustion engines?
- (s) § 60.4248: What definitions apply to this subpart?

14. The glycol dehydrator is subject to NESHAP, 40 CFR Part 63, Subpart HH and all affected equipment shall comply with all applicable requirements.

[40 CFR Part 63, NESHAP, Subpart HH]

- (a) § 63.760 Applicability and designation of affected source.
- (b) § 63.761 Definitions.
- (c) § 63.762 Startups, shutdowns, and malfunctions.
- (d) § 63.764 General standards.
- (e) § 63.765 Glycol dehydration unit process vent standards.
- (f) § 63.766 Storage vessel standards.
- (g) § 63.769 Equipment leak standards.
- (h) § 63.771 Control equipment requirements.
- (i) § 63.772 Test methods, compliance procedures, and compliance determinations.
- (j) § 63.773 Inspection and monitoring requirements.
- (k) § 63.774 Recordkeeping requirements.
- (l) § 63.775 Reporting requirements.
- (m) § 63.776 Delegation of authority.

(n) § 63.777 Alternative means of emission limitation.

15. The permittee shall abide by all applicable requirements of NESHAP, 40 CFR Part 63, Subpart ZZZZ affecting any of the engines subject to these requirements, including, but not limited to, the following. [40 CFR Part 63, NESHAP, Subpart ZZZZ]

- (a) § 63.6580 What is the purpose of subpart ZZZZ?
- (b) § 63.6585 Am I subject to this subpart?
- (c) § 63.6590 What parts of my plant does this subpart cover?
- (d) § 63.6595 When do I have to comply with this subpart?
- (e) § 63.6603 What emission limitations and operating limitations must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
- (f) § 63.6605 What are my general requirements for complying with this subpart?
- (g) § 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?
- (h) § 63.6615 When must I conduct subsequent performance tests?
- (i) § 63.6620 What performance tests and other procedures must I use?
- (j) § 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?
- (k) § 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?
- (l) § 63.6635 How do I monitor and collect data to demonstrate continuous compliance?
- (m) § 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?
- (n) § 63.6645 What notifications must I submit and when?
- (o) § 63.6650 What reports must I submit and when?
- (p) § 63.6655 What records must I keep?
- (q) § 63.6660 In what form and how long must I keep my records?
- (r) § 63.6665 What parts of the General Provisions apply to me?
- (s) § 63.6675 What definitions apply to this subpart?

16. The permittee shall comply with all applicable requirements in 40 CFR Part 60, Subpart OOOOb, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After December 6, 2022, for all affected facilities located at this site. [40 CFR §§63.5360b through 63.5408b]

- (a) §60.5360b What is the purpose of this subpart?
- (b) §60.5365b Am I subject to this subpart?
- (c) §60.5370b When must I comply with this subpart?
- (d) §60.5370b What are my requirements to address super-emitter emission events?
- (e) §60.5375b What GHG and VOC standards apply to well completions at well affected facilities?
- (f) §60.5376b What GHG and VOC standards apply to gas well liquids unloading operations at well affected facilities?

- (g) §60.5377b What GHG and VOC standards apply to oil wells with associated gas at well affected facilities?
- (h) §60.5380b What GHG and VOC standards apply to centrifugal compressor affected facilities?
- (i) §60.5385b What GHG and VOC standards apply to reciprocating compressor affected facilities?
- (j) §60.5386b What test methods and procedures must I use for my reciprocating compressor affected facilities?
- (k) §60.5390b What GHG and VOC standards apply to pneumatic controller affected facilities?
- (l) §60.5393b What GHG and VOC standards apply to pneumatic pump affected facilities?
- (m) §60.5395b What GHG and VOC standards apply to storage vessel affected facilities?
- (n) §60.5397b What GHG and VOC standards apply to fugitive emissions components affected facilities?
- (o) §60.5398b What alternative GHG and VOC standards apply to fugitive emissions components affected facilities?
- (p) §60.5399b What are the alternative means of emission limitations for GHG and VOC from well completions, reciprocating compressors, fugitive emissions components, and process unit equipment affected facilities; and what are the alternative fugitive emissions standards based on state, local, and tribal programs?
- (q) §60.5400b What GHG and VOC standards apply to process unit equipment affected facilities?
- (r) §60.5401b What are the alternative GHG and VOC standards for process unit equipment affected facilities?
- (s) §60.5402b What are the exceptions to the GHG and VOC standards for process unit equipment affected facilities?
- (t) §60.5403b What test methods and procedures must I use for my process unit equipment affected facilities?
- (u) §60.5405b What standards apply to sweetening unit affected facilities? §60.5406b What test methods and procedures must I use for my sweetening unit affected facilities?
- (v) §60.5407b What are the requirements for monitoring of emissions and operations from my sweetening unit affected facilities?
- (w) §60.5408b What is an optional procedure for measuring hydrogen sulfide in acid gas – Tutwiler Procedure?

At the time of permit issuance, NSPS Subpart OOOOb is currently under review by EPA. If federal legislation, rulemaking, or a court ruling invalidates all, or part of, OOOOb, the invalidated portions will no longer be applicable through this permit. In the interim, DEQ will exercise enforcement discretion as appropriate.

17. No later than 30 days after each anniversary date of the issuance of the initial Title V operating permit (November 30, 1998), the permittee shall submit to Air Quality Division of DEQ, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit.

[OAC 252:100-8-6 (c)(5)(A) & (D)]

18. The following records shall be maintained on-site to verify Insignificant Activities. No recordkeeping is required for those operations which qualify as Trivial Activities.

[OAC 252:100-8-6 (a)(3)(B)]

- (a) Emissions from crude oil or condensate storage marine and truck loading equipment operations at crude oil and natural gas production sites where the loading rate does not exceed 10,000 gallons per day averaged over a 30-day period: capacity and materials stored.
- (b) Emissions from storage tanks constructed with a capacity less than 39,894 gallons which store VOC with a vapor pressure less than 1.5 psia at maximum storage temperature: capacity and materials stored.
- (c) Activities having the potential to emit no more than 5 TPY of any criteria pollutant: emissions calculations.

19. Compliance Assurance Monitoring (CAM) Requirements and Specifications for engines EU-CM-2323, EU-CM-2324B, EU-CM-2325B and EU-CM-2819 are as follows:

- (a) § 64.1 Definitions.
- (b) § 64.2 Applicability.
- (c) § 64.3 Monitoring design criteria.
- (d) § 64.6 Approval of monitoring.
- (e) § 64.7 Operation of approved monitoring.
- (f) § 64.8 Quality improvement plan (QIP) requirements.
- (g) § 64.9 Reporting and recordkeeping requirements.

Table A: Monitoring Requirements for Engines

	Indicator No. 1	Indicator No. 2	Indicator No. 3*	Indicator No 4*
I. Indicator	O ₂ from engines	Pressure drop across the catalyst.	Temperature of exhaust gas into catalyst.	Temperature of exhaust gas out of catalyst.
Measurement Approach	O ₂ concentration into the catalyst is measured continuously using an in-line O ₂ sensor.	Pressure drop across the catalyst beds is measured monthly using a differential pressure gauge or a water manometer.	Exhaust gas temperature is measured continuously using an in-line thermocouple.	Exhaust gas temperature is measured continuously using an in line thermocouple.
II. Indicator Range	The indicator is alarm-based. The indicator range is no alarmed event lasting 30 minutes or longer. Excursions trigger corrective action, logging and reporting in semiannual report.	The indicator range is a pressure drop deviation of less than 2 in. H ₂ O from the benchmark. Excursions trigger corrective action, logging and reporting in semiannual report	The indicator range is above 750°F, but lower than 1,250°F. Excursions trigger corrective action, logging and reporting in semiannual report.	The indicator range is above 800°F, but lower than 1,300°F. Excursions trigger corrective action, logging and reporting in semiannual report.

	Indicator No. 1	Indicator No. 2	Indicator No. 3*	Indicator No 4*
III. Performance Criteria				
A. Data Representativeness	Observations are performed at the engine exhaust while the engine is operating.	Pressure drop across the catalyst is measured at the catalyst inlet and exhaust. The minimum accuracy of the device is ± 0.25 in. H ₂ O.	Temperature is measured at the inlet to the catalyst by a thermocouple. The minimum accuracy is $\pm 5^{\circ}\text{F}$.	Temperature is measured at the outlet of the catalyst by a thermocouple. The minimum accuracy is $\pm 5^{\circ}\text{F}$.
B. QA/QC – Practices and Criteria	O ₂ sensor replaced quarterly.	Pressure gauge calibrated quarterly. Pressure taps checked monthly for plugging.	Thermocouple visually checked quarterly and tested annually.	Thermocouple visually checked quarterly and tested annually.
C. Monitoring Frequency	O ₂ percent monitored continuously.	Pressure drop is measured monthly.	Temperature is measured continuously.	Temperature is measured continuously.
D. Data Collection Procedures	Records are maintained to document alarmed events and any required maintenance.	Records are maintained to document monthly readings and any required maintenance.	A strip chart records the temperature continuously or an operator or computer may record at least once per day.	A strip chart records the temperature continuously or an operator or computer may record at least once per day.
E. Averaging period	None, not to exceed maximum.	None, not to exceed maximum.	None, not to exceed minimums and maximums.	None, not to exceed minimums and maximums.

*Minimum requirement is to include at least one of these two indicators.

20. CAM for Glycol Dehydrator are as follows:

- (a) § 64.1 Definitions.
- (b) § 64.2 Applicability.
- (c) § 64.3 Monitoring design criteria.
- (d) § 64.6 Approval of monitoring.
- (e) § 64.7 Operation of approved monitoring.
- (f) § 64.8 Quality improvement plan (QIP) requirements.
- (g) § 64.9 Reporting and recordkeeping requirements.

Table B: Monitoring Requirements for Glycol Dehydrator

	Indicator No. 1	Indicator No. 2
I. Indicator	Dehydration unit Inspection and Preventative Maintenance	Temperature of the vapor stream at the outlet of the condenser.
Measurement Approach	Daily inspection.	Stream temperature is measured continuously using a temperature gauge.
II. Indicator Range	Noticeable leaks or improper function.	A condenser outlet stream at or below 95 °F.
III. Performance Criteria		
A. Data Representativeness	Inspections are performed on the dehydration unit and temperature gauge.	Temperature is measured continuously. Accuracy range is $\pm 2\%$ of the temperature measured in degrees Fahrenheit.
B. Verification of Operational Status	Daily inspections verify the dehydration unit and temperature gauge are working correctly.	The temperature gauge will be used in accordance with manufacturer specifications.

	Indicator No. 1	Indicator No. 2
C. QA/QC – Practices and Criteria	Qualified personnel perform inspection.	The temperature gauge will be inspected during the daily temperature reading.
D. Monitoring Frequency	Daily inspections are performed during temperature recording and recorded at least once daily.	Temperature is measured continuously and recorded at least once daily.

21. This facility is considered an existing PSD facility. As such, the facility is subject to the provisions of OAC 252:100-8-36.2(c) when using projected actual emissions (PAE) for any project as defined therein. [OAC 252:100-8-36.2(c)]
22. The permittee shall maintain records of operations as listed below. These records shall be maintained on-site for at least five years after the date of recording and shall be provided to regulatory personnel upon request. [OAC 252:100-43]
- (a) O&M records for each engine operated less than 440 hours per semi-annual period and not tested.
 - (b) *For both scenarios*, periodic testing (NO_x and CO) for engines CM-2819, CM-2322, CM-2323, CM-2324B, and CM-2325B in EUG-3A, CM-4203R, CM-2326, CM-2327, and CM-2328 in EUG 3B, and any replacement engines.
 - (c) For Scenario 2, periodic formaldehyde testing for engines CM-2326, CM-2327, and CM-2328.
 - (d) For the fuel(s) burned, the appropriate document(s) as described in Specific Condition No. 2.
 - (e) Condensate tank throughputs and condensate loading (monthly and 12-month rolling totals).
 - (f) Records required by Specific Condition No. 19 and Specific Condition No. 20 for Compliance Assurance Monitoring.
 - (g) Facility natural gas throughput, MMSCFD (monthly average).
 - (h) Glycol recirculation rate (monthly) or maximum pump capacity.
 - (i) Inlet gas analysis for H₂S concentration (quarterly).
 - (j) Natural gas throughput of the amine unit (MMSCFD, monthly average).
 - (k) Records of volume of gas venting, estimates of VOC content, and resultant VOC emissions (monthly and 12-month rolling totals).
 - (l) Records of VRU downtime based on 12-month rolling totals.
 - (m) Records as required by 40 CFR Part 60, Subparts JJJJ, KKK, and OOOOb.
 - (n) Records as required by 40 CFR Part 63, Subparts HH and ZZZZ.
 - (o) Records required per OAC 252:100-8-36.2(c) to show that the emission increases do not exceed to PSD significance levels.
23. The permittee shall submit an application for modification of the Part 70 operating permit within 180 days of commencement of operation of any emission source whose construction has been authorized by this permit. [OAC 252:100-8-6]

**MAJOR SOURCE AIR QUALITY PERMIT
STANDARD CONDITIONS
(September 15, 2025)**

SECTION I. DUTY TO COMPLY

A. This is a permit to operate / construct this specific facility in accordance with the federal Clean Air Act (42 U.S.C. 7401, et al.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]

C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.

[40 CFR §70.6(b), OAC 252:100-8-1.3 and OAC 252:100-8-6(a)(7)(A) and (b)(1)]

D. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in assessing penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations. [OAC 252:100-8-6(a)(7)(B)]

SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

A. Any exceedance resulting from an emergency and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV (Emergencies). [OAC 252:100-8-6(a)(3)(C)(iii)(I) & (II)]

B. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements. [OAC 252:100-8-6(a)(3)(C)(iv)]

C. Every written report submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F. [OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING

A. The permittee shall keep records as specified in this permit. These records, including monitoring data and necessary support information, shall be retained on-site or at a nearby field office for a period of at least five years from the date of the monitoring sample, measurement, report, or application, and shall be made available for inspection by regulatory personnel upon request. Support information includes all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Where appropriate, the permit may specify that records may be maintained in computerized form.

[OAC 252:100-8-6(a)(3)(B)(ii), OAC 252:100-8-6(c)(1), and OAC 252:100-8-6(c)(2)(B)]

B. Records of required monitoring shall include:

- (1) the date, place and time of sampling or measurement;
- (2) the date or dates analyses were performed;
- (3) the company or entity which performed the analyses;
- (4) the analytical techniques or methods used;
- (5) the results of such analyses; and
- (6) the operating conditions existing at the time of sampling or measurement.

[OAC 252:100-8-6(a)(3)(B)(i)]

C. No later than 30 days after each six (6) month period, after the date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to AQD a report of the results of any required monitoring. All instances of deviations from permit requirements since the previous report shall be clearly identified in the report. Submission of these periodic reports will satisfy any reporting requirement of Paragraph E below that is duplicative of the periodic reports, if so noted on the submitted report.

[OAC 252:100-8-6(a)(3)(C)(i) and (ii)]

D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II (Reporting Of Deviations From Permit Terms) of these standard conditions.

[OAC 252:100-8-6(a)(3)(C)(iii)]

E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act.

[OAC 252:100-43]

F. Any Annual Certification of Compliance, Semi Annual Monitoring and Deviation Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. Any Excess Emission Report submitted in accordance with this permit shall be certified by a responsible official or designee. This certification shall be signed by a responsible official (or designee, if allowed), and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f), OAC 252:100-8-6(a)(3)(C)(iv), OAC 252:100-8-6(c)(1), OAC 252:100-9-7(e), and OAC 252:100-5-2.1(f)]

G. Any owner or operator subject to the provisions of New Source Performance Standards (NSPS) under 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants (NESHAP) under 40 CFR Parts 61 and 63 shall maintain a file of all measurements and other information required by the applicable general provisions and subpart(s). These records shall be maintained in a permanent file suitable for inspection, shall be retained for a period of at least five years as required by Paragraph A of this Section, and shall include records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR §§60.7 and 63.10, 40 CFR Part 61, Subpart A, and OAC 252:100, Appendix Q]

H. The permittee of a facility that is operating subject to a schedule of compliance shall submit to the DEQ a progress report at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. [OAC 252:100-8-6(c)(4)]

I. All testing must be conducted under the direction of qualified personnel by methods approved by the Division Director. All tests shall be made and the results calculated in accordance with standard test procedures. The use of alternative test procedures must be approved by EPA. When a portable analyzer is used to measure emissions it shall be setup, calibrated, and operated in accordance with the manufacturer's instructions and in accordance with a protocol meeting the requirements of the "AQD Portable Analyzer Guidance" document or an equivalent method approved by Air Quality. [OAC 252:100-8-6(a)(3)(A)(iv), and OAC 252:100-43]

J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter (PM₁₀). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).

K. Unless required to be submitted to CEDRI by a specific regulation, the permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 CFR Parts 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards.

[OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

SECTION IV. COMPLIANCE CERTIFICATIONS

A. No later than 30 days after each anniversary date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to the AQD, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit and of any other applicable requirements which have become effective since the issuance of this permit.

[OAC 252:100-8-6(c)(5)(A), and (D)]

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source.

[OAC 252:100-8-6(c)(5)(C)(i)-(v)]

C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

[OAC 252:100-8-5(f) and OAC 252:100-8-6(c)(1)]

D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based, except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.

[OAC 252:100-8-5(e)(8)(B) and OAC 252:100-8-6(c)(3)]

SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification.

[OAC 252:100-8-6(c)(6)]

SECTION VI. PERMIT SHIELD

A. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC 252:100-8) shall be deemed compliance with the applicable requirements identified and included in this permit.

[OAC 252:100-8-6(d)(1)]

B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are summarized in the Specific Conditions of this permit.

[OAC 252:100-8-6(d)(2)]

SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be based on the best available information accepted by AQD.

[OAC 252:100-5-2.1, OAC 252:100-5-2.2, and OAC 252:100-8-6(a)(8)]

SECTION VIII. TERM OF PERMIT

A. The term of an Initial Title V or Title V renewal operating permit shall be five years from the date of issuance. Modifications to a Title V or Title V renewal permit does not reset the five year term. The expiration date of all permit actions is specified on the Part 70 permit authorization page.
[OAC 252:100-8-6(a)(2)(A)]

B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration.
[OAC 252:100-8-7.1(d)(1)]

C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-8-1.4(a)]

D. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-8-4(b)(5)]

SECTION IX. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
[OAC 252:100-8-6 (a)(6)]

SECTION X. PROPERTY RIGHTS

A. This permit does not convey any property rights of any sort, or any exclusive privilege.
[OAC 252:100-8-6(a)(7)(D)]

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued.
[OAC 252:100-8-6(c)(6)]

SECTION XI. DUTY TO PROVIDE INFORMATION

A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing, terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit.

[OAC 252:100-8-6(a)(7)(E)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. § 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment.

[OAC 252:100-8-6(a)(7)(E)]

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within thirty (30) days after such sale or transfer.

[Oklahoma Clean Air Act, 27A O.S. § 2-5-112(G)]

SECTION XII. REOPENING, MODIFICATION & REVOCATION

A. The permit may be modified, revoked, reopened and reissued, or terminated for cause. Except as provided for minor permit modifications, the filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition.

[OAC 252:100-8-6(a)(7)(C) and OAC 252:100-8-7.2(b)]

B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances:

[OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]

- (1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
- (2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (3) The DEQ or the EPA determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.
- (4) DEQ determines that the permit should be amended under the discretionary reopening provisions of OAC 252:100-8-7.3(b).

C. The permit may be reopened for cause by EPA, pursuant to the provisions of OAC 100-8-7.3(d).

[OAC 100-8-7.3(d)]

D. The permittee shall notify AQD before making changes other than those described in Section XVIII (Operational Flexibility), those qualifying for administrative permit amendments, or those defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII). The notification should include any changes which may alter the status of a "grandfathered source," as defined under AQD rules. Such changes may require a permit modification.

[OAC 252:100-8-7.2(b) and OAC 252:100-5-1.1]

E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited.

[OAC 252:100-8-6(c)(6)]

SECTION XIII. INSPECTION & ENTRY

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(17) for confidential information submitted to or obtained by the DEQ under this section):

- (1) enter upon the permittee's premises during reasonable/normal working hours where a source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (2) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (3) inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (4) as authorized by the Oklahoma Clean Air Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit.

[OAC 252:100-8-6(c)(2)]

SECTION XIV. EMERGENCIES

A. Any exceedance resulting from an emergency shall be reported to AQD promptly but no later than 4:30 p.m. on the next working day after the permittee first becomes aware of the exceedance. This notice shall contain a description of the emergency, the probable cause of the exceedance, any steps taken to mitigate emissions, and corrective actions taken.

[OAC 252:100-8-6(a)(3)(C)(iii)(I) and (IV)]

B. Any exceedance that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to AQD as soon as is practicable; but under no circumstance shall notification be more than 24 hours after the exceedance.

[OAC 252:100-8-6(a)(3)(C)(iii)(II)]

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

improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. [OAC 252:100-8-2]

D. Qualification for consideration of mitigating factors shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that:

[OAC 252:100-8-6(e)(2)]

- (1) an emergency occurred and the permittee can identify the cause or causes of the emergency;
- (2) the permitted facility was at the time being properly operated;
- (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [OAC 252:100-8-6(e)(3)]

F. Every written report or document submitted under this section shall be certified as required by Section III (Monitoring, Testing, Recordkeeping & Reporting), Paragraph F.

[OAC 252:100-8-6(a)(3)(C)(iv)]

SECTION XV. RISK MANAGEMENT PLAN

The permittee, if subject to the provision of Section 112(r) of the Clean Air Act, shall develop and register with the appropriate agency a risk management plan by June 20, 1999, or the applicable effective date. [OAC 252:100-8-6(a)(4)]

SECTION XVI. INSIGNIFICANT ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate individual emissions units that are either on the list in Appendix I to OAC Title 252, Chapter 100, or whose actual calendar year emissions do not exceed any of the limits below. Any activity to which a State or Federal applicable requirement applies is not insignificant even if it meets the criteria below or is included on the insignificant activities list.

- (1) 5 tons per year of any one criteria pollutant.
- (2) 2 tons per year for any one hazardous air pollutant (HAP) or 5 tons per year for an aggregate of two or more HAP's, or 20 percent of any threshold less than 10 tons per year for single HAP that the EPA may establish by rule.

[OAC 252:100-8-2 and OAC 252:100, Appendix I]

SECTION XVII. TRIVIAL ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate any individual or combination of air emissions units that are considered inconsequential

and are on the list in Appendix J. Any activity to which a State or Federal applicable requirement applies is not trivial even if included on the trivial activities list.

[OAC 252:100-8-2 and OAC 252:100, Appendix J]

SECTION XVIII. OPERATIONAL FLEXIBILITY

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating.

[OAC 252:100-8-6(a)(10) and (f)(1)]

B. The permittee may make changes within the facility that:

- (1) result in no net emissions increases,
- (2) are not modifications under any provision of Title I of the federal Clean Air Act, and
- (3) do not cause any hourly or annual permitted emission rate of any existing emissions unit to be exceeded;

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of seven (7) days, or twenty four (24) hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this paragraph.

[OAC 252:100-8-6(f)(2)]

SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS

A. The following applicable requirements and state-only requirements apply to the facility unless elsewhere covered by a more restrictive requirement:

- (1) Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter.
[OAC 252:100-13]
- (2) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU.
[OAC 252:100-19]
- (3) For all emissions units not subject to an opacity limit promulgated under 40 CFR Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for:
[OAC 252:100-25]
 - (a) Short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity;
 - (b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;

- (c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
 - (d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.
- (4) No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]
- (5) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]
- (6) Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with a vapor-recovery system. [OAC 252:100-37-15(b)]
- (7) All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]

SECTION XX. STRATOSPHERIC OZONE PROTECTION

A. The permittee shall comply with the following standards for production and consumption of ozone-depleting substances: [40 CFR Part 82, Subpart A]

- (1) Persons producing, importing, or placing an order for production or importation of certain class I and class II substances, HCFC-22, or HCFC-141b shall be subject to the requirements of §82.4;
- (2) Producers, importers, exporters, purchasers, and persons who transform or destroy certain class I and class II substances, HCFC-22, or HCFC-141b are subject to the recordkeeping requirements at §82.13; and
- (3) Class I substances (listed at Appendix A to Subpart A) include certain CFCs, Halons, HBFCs, carbon tetrachloride, trichloroethane (methyl chloroform), and bromomethane (Methyl Bromide). Class II substances (listed at Appendix B to Subpart A) include HCFCs.

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant. [40 CFR Part 82, Subpart B]

C. The permittee shall comply with the following standards for recycling and emissions reduction except as provided for MVACs in Subpart B: [40 CFR Part 82, Subpart F]

- (1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156;
- (2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158;
- (3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161;
- (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record-keeping requirements pursuant to § 82.166;
- (5) Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to § 82.158; and
- (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

SECTION XXI. CREDIBLE EVIDENCE

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any provision of the Oklahoma implementation plan, nothing shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [OAC 252:100-43-6]

Department of Environmental Quality (DEQ)
Air Quality Division (AQD)
Acronym List
9-8-2025

ACFM	Actual Cubic Feet per Minute	FR	Federal Register
AD	Applicability Determination		
AFRC	Air-to-Fuel Ratio Controller		
API	American Petroleum Institute	GACT	Generally Achievable Control Technology
ASTM	American Society for Testing and Materials	GAL	Gallon (gal)
AVO	Audio, Visual, or Olfactory	GDF	Gasoline Dispensing Facility
		GEP	Good Engineering Practice
BACT	Best Available Control Technology	GHG	Greenhouse Gases
BAE	Baseline Actual Emissions	GR	Grain(s) (gr)
BBL	Barrel(s)		
BHP	Brake Horsepower (bhp)	H₂CO	Formaldehyde
BTEX	Benzene, Toluene, Ethylbenzene, Xylene	H₂S	Hydrogen Sulfide
BTU	British thermal unit (Btu)	HAP	Hazardous Air Pollutants
		HC	Hydrocarbon
C&E	Compliance and Enforcement	HCFC	Hydrochlorofluorocarbon
CAA	Clean Air Act	HFR	Horizontal Fixed Roof
CAM	Compliance Assurance Monitoring	HON	Hazardous Organic NESHAP
CAS	Chemical Abstract Service	HP	Horsepower (hp)
CAAA	Clean Air Act Amendments	HR	Hour (hr)
CC	Catalytic Converter		
CCR	Continuous Catalyst Regeneration	I&M	Inspection and Maintenance
CD	Consent Decree	IBR	Incorporation by Reference
CEM	Continuous Emission Monitor	ICE	Internal Combustion Engine
CFC	Chlorofluorocarbon		
CFR	Code of Federal Regulations	LAER	Lowest Achievable Emission Rate
CI	Compression Ignition	LB	Pound(s) [Mass] (lb, lbs, lbm)
CNG	Compressed Natural Gas	LB/HR	Pound(s) per Hour (lb/hr)
CO	Carbon Monoxide or Consent Order	LDAR	Leak Detection and Repair
COA	Capable of Accommodating	LNG	Liquefied Natural Gas
COM	Continuous Opacity Monitor	LT	Long Ton(s) (metric)
		LTPD	Long Tons per Day
D	Day	LPE	Legally and Practicably Enforceable
DEF	Diesel Exhaust Fluid		
DG	Demand Growth	M	Thousand (Roman Numeral)
DSCF	Dry Standard (At Standard Conditions) Cubic Foot (Feet)	MAAC	Maximum Acceptable Ambient Concentration
		MACT	Maximum Achievable Control Technology
EGU	Electric Generating Unit	MM	Prefix used for Million (Thousand-Thousand)
EI	Emissions Inventory	MMBTU	Million British Thermal Units (MMBtu)
EPA	Environmental Protection Agency	MMBTUH	Million British Thermal Units per Hour (MMBtu/hr)
ESP	Electrostatic Precipitator	MMSCF	Million Standard Cubic Feet (MMscf)
EUG	Emissions Unit Group	MMSCFD	Million Standard Cubic Feet per Day
EUSGU	Electric Utility Steam Generating Unit	MSDS	Material Safety Data Sheet
		MWC	Municipal Waste Combustor
FCE	Full Compliance Evaluation	MWe	Megawatt Electrical
FCCU	Fluid Catalytic Cracking Unit		
FEL	Federally Enforceable Limit(s)	NA	Nonattainment
FESOP	Federally Enforceable State Operating Permit		
FIP	Federal Implementation Plan		

NAAQS	National Ambient Air Quality Standards	ROAT	Regional Office at Tulsa
NAICS	North American Industry Classification System	RVP	Reid Vapor Pressure
NESHAP	National Emission Standards for Hazardous Air Pollutants	SCC	Source Classification Code
NH₃	Ammonia	SCF	Standard Cubic Foot
NMHC	Non-methane Hydrocarbon	SCFD	Standard Cubic Feet per Day
NGL	Natural Gas Liquids	SCFM	Standard Cubic Feet per Minute
NO₂	Nitrogen Dioxide	SCR	Selective Catalytic Reduction
NO_x	Nitrogen Oxides	SEP	Supplemental Environmental Project
NOI	Notice of Intent	SER	Significant Emission Rate
NSCR	Non-Selective Catalytic Reduction	SI	Spark Ignition
NSPS	New Source Performance Standards	SIC	Standard Industrial Classification
NSR	New Source Review	SIP	State Implementation Plan
O₃	Ozone	SNCR	Selective Non-Catalytic Reduction
O&G	Oil and Gas	SO₂	Sulfur Dioxide
O&M	Operation and Maintenance	SO_x	Sulfur Oxides
O&NG	Oil and Natural Gas	SOP	Standard Operating Procedure
OAC	Oklahoma Administrative Code	SRU	Sulfur Recovery Unit
OC	Oxidation Catalyst	T	Tons
OGI	Optical Gas Imaging	TAC	Toxic Air Contaminant
PAH	Polycyclic Aromatic Hydrocarbons	TEG	Triethylene Glycol
PAE	Projected Actual Emissions	THC	Total Hydrocarbons
PAL	Plant-wide Applicability Limit	TPY	Tons per Year
Pb	Lead	TRS	Total Reduced Sulfur
PBR	Permit by Rule	TSP	Total Suspended Particulates
PCB	Polychlorinated Biphenyls	TV	Title V of the Federal Clean Air Act
PCE	Partial Compliance Evaluation	µg/m³	Micrograms per Cubic Meter
PEA	Portable Emissions Analyzer	US EPA	U. S. Environmental Protection Agency
PFAS	Per- and Polyfluoroalkyl Substance	VFR	Vertical Fixed Roof
PM	Particulate Matter	VMT	Vehicle Miles Traveled
PM_{2.5}	Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers	VOC	Volatile Organic Compound
PM₁₀	Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers	VOL	Volatile Organic Liquid
POM	Particulate Organic Matter or Polycyclic Organic Matter	VRT	Vapor Recovery Tower
ppb	Parts per Billion	VRU	Vapor Recovery Unit
ppm	Parts per Million	YR	Year
ppmv	Parts per Million Volume	2SLB	2-Stroke Lean Burn
ppmvd	Parts per Million Dry Volume	4SLB	4-Stroke Lean Burn
PSD	Prevention of Significant Deterioration	4SRB	4-Stroke Rich Burn
psi	Pounds per Square Inch		
psia	Pounds per Square Inch Absolute		
psig	Pounds per Square Inch Gage		
RACT	Reasonably Available Control Technology		
RATA	Relative Accuracy Test Audit		
RAP	Regulated Air Pollutant or Reclaimed Asphalt Pavement		
RFG	Refinery Fuel Gas		
RICE	Reciprocating Internal Combustion Engine		
RO	Responsible Official		



NSR PERMIT

AIR QUALITY DIVISION
STATE OF OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
707 N. ROBINSON, SUITE 4100
P.O. BOX 1677
OKLAHOMA CITY, OKLAHOMA 73101-1677

Permit No. 2020-0500-C (M-2)

Mustang Gas Products, LLC,

having complied with the requirements of the law, is hereby granted permission to construct proposed sources within the boundaries of the Binger Gas Plant located at Section 26, Township 10N, and Range 11W at Binger, Caddo County, Oklahoma, subject to standard conditions dated September 15, 2025, and specific conditions, both attached.

In the absence of commencement of construction, this permit shall expire 18 months from the issuance date, except as authorized under Section VIII of the Standard Conditions.

DRAFT

Kendal Stegmann, Division Director

Issuance Date

Attn: Mr. Steve Hoppe
Vice President, Operations
Mustang Gas Products, LLC
9800 N. Oklahoma Ave.
Oklahoma City, OK 73114-7406

SUBJECT: NSR Construction Permit No. **2020-0500-C (M-2)**
Binger Gas Plant (Facility ID: 1085)
Sec. 26 – T 10N – R 11W, Binger, Caddo County, Oklahoma
Permit Writer: Iftekhar Hossain

Dear Mr. Hoppe:

Enclosed is the permit authorizing construction of the referenced facility. Please note that this permit is issued subject to the certain standards and specific conditions, which are attached. These conditions must be carefully followed since they define the limits of the permit and will be confirmed by periodic inspections.

Also note that you are required to annually submit an emissions inventory for this facility. An emissions inventory must be completed through DEQ's electronic reporting system by April 1st of every year. Any questions concerning the submittal process should be referred to the Emissions Inventory Staff at (405) 702-4100.

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact the permit writer at Iftekhar.hossain@deq.ok.gov, or at (405) 702-4199.

Sincerely,

Phillip Fielder, P.E.
Chief Engineer
AIR QUALITY DIVISION

Enclosures

October 15, 2025

Attn: Mr. Steve Hoppe
Vice President, Operations
Mustang Gas Products, LLC
9800 N. Oklahoma Ave.
Oklahoma City, OK 73114-7406

SUBJECT: NSR Construction Permit No. **2020-0500-C (M-2)**
Binger Gas Plant (Facility ID: 1085)
Sec. 26 – T 10N – R11W, Binger, Caddo County, Oklahoma
Permit Writer: Iftekhar Hossain

Dear Mr. Hoppe:

Air Quality has received the permit application for the referenced facility and completed initial review. This application has been determined to be a **Tier II** application. In accordance with 27A O.S. 2-14-301 and 302 and OAC 252:4-7-13(c), the enclosed draft permit is now ready for public review. The requirements for public review of the draft permit include the following steps, which **you** must accomplish:

1. Publish at least one legal notice (one day) in at least one newspaper of general circulation within the county where the facility is located (Instructions enclosed);
2. Submit sample notice and provide date of publication to **AQD 5 days prior to notice publishing;**
3. Provide for public review, for a period of 30 days following the date of the newspaper announcement, a copy of the application and draft permit at a convenient location (preferentially at a public location) within the county of the facility;
4. Send AQD a signed affidavit of publication for the notice(s) from Item #1 above within 20 days of publication of the draft permit. Any additional comments or requested changes you have for the draft permit or the application should be submitted within 30 days of publication.

Thank you for your cooperation in this matter. If we may be of further service, or you have any questions about this permit, please contact the permit writer at Iftekhar.hossain@deq.ok.gov or me at (405) 702-4100.

Sincerely,



Phillip Fielder, P.E.
Chief Engineer
AIR QUALITY DIVISION

SAMPLE NOTICE (*Italicized print is to be filled in by the applicant.*):

Version 1 – For those using the Traditional NSR Process for a construction permit application review

DEQ NOTICE OF TIER ...II or III... DRAFT PERMIT

A Tier ...II or III... application for an air quality ...type of permit or permit action being sought (e.g., construction permit for a new major facility or construction permit for a modification at an existing major facility)... has been filed with the Oklahoma Department of Environmental Quality (DEQ) by applicant, ...name and address.

The applicant requests approval to ...brief description of purpose of application... at the ...site/facility name ... [proposed to be] located at ...physical address (if any), driving directions, and legal description including county....

In response to the application, DEQ has prepared a draft construction permit [modification] (Permit Number: ...xxxx-xxxx-x...), which may be reviewed at ...locations (one must be in the county where the site/facility is located)... or at the Air Quality Division's main office (see address below). The draft permit is also available for review under Permits for Public Review on the DEQ Web Page: <https://oklahoma.gov/deq.html>.

This draft permit would authorize the facility to emit the following regulated pollutants: (list each pollutant and amounts in tons per year (TPY)). [For facility modifications only, either add the phrase: **, which represents** (*identify the emissions change involved in the modification*), or add the sentence: **The modification will not result in a change in emissions.**] [For PSD permits only, add: **The project will consume the following increment levels:** (*list the amount of increment consumption for each pollutant in ug/m³*).]

The public comment period ends 30 days after the date of publication of this notice. Any person may submit written comments concerning the draft permit to the Air Quality Division contact listed below or as directed through the corresponding online notice. [Modifications only, add: **Only those issues relevant to the proposed modification(s) are open for comment.**] **A public meeting on the draft permit [modification] may also be requested in writing at the same address. Note that all public meetings are to be arranged and conducted by DEQ staff.**

Information on all permit actions including draft permits, proposed permits, final issued permits and applicable review timelines are available in the Air Quality section of the DEQ Web page: <https://oklahoma.gov/deq.html>.

For additional information, contact ...names, addresses and telephone numbers of contact persons for the applicant, or contact DEQ at: Chief Engineer, Air Quality Division, 707 N. Robinson, Suite 4100, P.O. Box 1677, Oklahoma City, OK, 73101-1677. Phone No. (405) 702-4100.

