#### DRAFT/PROPOSED

# OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

MEMORANDUM October 1, 2020

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

**THROUGH:** Richard Groshong, Env. Programs Manager, Compliance & Enforcement

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

**THROUGH:** David Schutz, P.E., New Source Permits Section

**FROM:** Iftekhar Hossain, P.E., New Source Permit Section

**SUBJECT:** Evaluation of Permit Application No. **2015-1174-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 0.5 miles to Cemetery Road. Turn left (north) on Cemetery Road and travel approximately 0.5 miles. The

facility is located on the west side of the road.

#### **SECTION I. INTRODUCTION**

Mustang Gas Products LLC (Mustang) has requested a construction permit for a significant modification to their existing major source for Binger Gas Plant (SCI 1321). The facility is currently operating under Permit No. 2015-1174-TVR3 (M-1) issued on June 20, 2019. The facility is a Prevention of Significant Deterioration (PSD) major source in an attainment area and a minor source of Hazardous Air Pollutants (HAPs).

In the revised permit application, dated October 1, 2020, Mustang intends to accomplish the following (Project).

- 1. Install one (1) natural gas-fired compressor engine (EU-CM-2819) with a catalytic converter (CC), and,
- 2. Install a catalytic converter (CC) controls on one (1) "grandfathered" engine (EU-CM-2323).

These changes to the facility have been made to allow for operational flexibility. The engines will allow the facility to shutdown and do maintenance or repair work on the engines for an extended period of time. The facility gas throughput is limited by the glycol dehydration unit which is currently permitted at its maximum capacity of 15 MMscf/day.

This permit will also incorporate the amine unit still vent (AMINE) from an insignificant emission source to a permitted unit. The amine unit was installed in 2005, evaluated in Applicability Determination No. 97-253-AD (M-1), and carried forward in all subsequent permits. The amine unit is used for removal of CO<sub>2</sub> from the NGL stream and historically has been considered an insignificant emission source.

The addition of the engine to the facility is considered a "physical change." Based on the need to make the non-selective catalytic converter enforceable for an engine not subject to NSPS, as specified under OAC 252:100-8-7.2(b)(2), the changes qualify as a "significant modification" of the existing major source permit and requires a construction permit. The permit is therefore subject to **Tier II** application processing. Public review of the application and draft permit (when available) are required. A 45-day EPA review is also required.

Since the facility emits more than 100 TPY of a regulated pollutant, it is subject to Title V permitting requirements. Emission units (EUs) have been arranged into Emission Unit Groups (EUGs) as outlined in Section III. Field-grade natural gas is the primary fuel with the facility being operated continuously.

#### SECTION II. 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. Inlet gas then passes through inlet compressors and to the cryogenic process. Gas firsts 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 CO<sub>2</sub> 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 CO<sub>2</sub>. The CO<sub>2</sub> remains in solution. The CO<sub>2</sub> 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 limited to 15.0 MMSCFD.

#### **SECTION III. EQUIPMENT**

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

EU	EU Point Description		HP	Serial #	Construction
					Date
EU-CM-2819	P-CM-2819	Waukesha L7042GSI * w/CC †	1,232	TBD	1969 <sup>1</sup>
(New)					
EU-CM-2322	P-CM-2322	White-Superior 12G825	1,200	268329	1976/2017 <sup>2</sup>
EU-CM-2323	P-CM-2323	Waukesha L7042GSI * w/CC	1,232	279904	1976 <sup>3</sup>

EU	Point	Description	HP	Serial #	Construction
					Date
EU-CM-2325	P-CM-2325	Waukesha L7042GSI * w/CC	1,232	287379	2006

<sup>\* 4-</sup>stroke rich burn (4S-RB) with air-to-fuel ratio controller (AFRC); † w/CC – Equipped with catalytic convertor.

# **EUG-3B** Permitted Engine (Subject to NSPS Subpart JJJJ)

EU	Point	Description	HP	Serial #	Mfg./Const. Date
EU-CM-2324	P-CM-2324	Waukesha L7042GSI w/CC	1,232	308609	2019/2019 **

<sup>\* 4</sup>S-RB with AFRC; \*\* Re-manufactured in 2019 and installed onsite in 2019.

# **EUG-4** Glycol Dehydrator

EU	Point	Description	<b>Construction Date</b>
EU-TEGV-2	P-TEGV-2	Still Vent	2008
EU-TEGF-2	P-TEGF-2	Flash Tank	2008
EU-TEGH-2	P-TEGH-2	Reboiler *	2008

<sup>\*</sup>The Glycol Reboiler (0.375 MMBTUH) emissions are insignificant.

# **EUG-5** Regeneration Heater

EU	Point	Description	MMBTUH	<b>Construction Date</b>
EU-HT-1	P-HT-1	Regeneration Heater	1.0	1976

# **EUG-6A** Condensate Storage Tanks

EU	Point	Description	Capacity (gallons)	<b>Construction Date</b>
EU-TK-2	P-TK-2	Condensate Tank	8,820	1976
EU-TK-3	P-TK-3	Condensate Tank	8,820	1976

# **EUG-6B** Insignificant Storage Tanks

EU	Point	Description	Capacity (gallons)	<b>Construction Date</b>
EU-TK-1	P-TK-1	Slop Oil/Drip Oil	4,200	1976
EU-TK-4	P-TK-4	Lube Oil Tank	6,000	1976
EU-TK-5	P-TK-5	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

<sup>&</sup>lt;sup>1</sup> Manufactured in 1969 and to be installed onsite in 2020.

<sup>&</sup>lt;sup>2</sup> Manufactured in 1976 and installed onsite in 2017.

<sup>&</sup>lt;sup>3</sup> Manufactured in 1976 and CC to be installed in 2020.

EU	Point	Description	Capacity (gallons)	<b>Construction Date</b>
EU-TK-12	P-TK-12	Methanol Tank	576	1976
EU-TK-13	P-TK-13	Methanol Tank	600	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-TK-22	P-TK-22	Glycol Storage Tank	500	2018
EU-TK-23	P-TK-23	Glycol Storage Tank	600	2018

<sup>\*</sup> Mustang operates this tank. The tank is owned by Rosser.

# **EUG-7** Miscellaneous-Process Piping Fugitives

Component	Service	Components #
Valves	Gas/Vapor	896
Pump Seals	Light Liquid	3
Compressor Seals	All	16
Relief Valves	All	45
Threaded Connections	All	4,534

# **EUG 8 Equipment Blowdowns**

EU	Point	Equipment	MMSCF/Yr	<b>Construction Date</b>
ATMV-1	ATMV-1	Atmospheric Vent	80 with 0.1% VOC	1976

# **EUG-9** Amine Unit

EU	Point	Description	MMBTUH	<b>Construction Date</b>
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	<b>Construction Date</b>
TL-1	TL-1	Condensate Loading	17,617	1976

#### SECTION IV. EMISSIONS

#### **ENGINES**

Emissions estimates for the compressor engines are based on continuous operation. The emission factors for NOx, CO, and VOC for engines EU-CM-2323, EU-CM-2322, EU-CM-2325, and EU-CM-2819 are based on manufacturer's data. For engine EU-CM-2324, the emission factors are based on NSPS Subpart JJJJ limits for modified/reconstructed engines. The emission factors for formaldehyde (HCHO) are based on AP-42 (7/00), Section 3.2, 4-stroke rich-burn engines. Note that the VOC factor contains HCHO.

**Emission Factors for Engines** 

EU ID#	Engine Specification	NOx g/hp-hr	CO g/hp-hr	VOC g/hp-hr	HCHO 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-2324	Waukesha L7042GSI w/CC	3.0	4.0	1.0	0.0205*
EU-CM-2325	Waukesha L7042GSI w/CC	2.0	3.0	0.4	0.0205*
EU-CM-2819	Waukesha L7042GSI w/CC	3.0	4.0	1.0	0.0205*

<sup>\*</sup> A 75% control efficiency has been applied as these engines are equipped with catalytic converters (w/CC).

**Emissions for Engines** 

EU	EU Make/Model		$NO_X$		CO		OC
EU	Wiake/Model	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
CM-2322	White-Superior 12G825	47.62	208.57	47.62	208.57	5.29	23.17
CM-2323	Waukesha L7042GSI w/CC	8.15	35.69	10.86	47.59	2.72	11.90
CM-2324	Waukesha L7042GSI w/CC	8.15	35.69	10.86	47.59	2.72	11.90
CM-2325	Waukesha L7042GSI w/CC	5.43	23.78	8.15	35.7	1.09	4.77
CM-2819	Waukesha L7042GSI w/CC	8.15	35.69	10.86	47.59	2.72	11.90

#### **Stack Parameters**

Engine ID	Description	Stack Height, Feet	Stack ID, Inches	Stack Flow, ACFM	Stack Temp., °F
EU-CM-2322	White-Superior 12G825	19	12	2,764	800
EU-CM-2323	Waukesha L7042GSI w/CC	19	12	3,180	780
EU-CM-2325	Waukesha L7042GSI w/CC	19	12	3,180	780
EU-CM-2324	Waukesha L7042GSI w/CC	19	12	3,180	780
EU-CM-2819	Waukesha L7042GSI w/CC	19	12	3,180	780

#### REBOILERS AND HEATER

Reboilers and regeneration heater combustion emissions are based on AP-42 (7/98), Section 1.4.

#### **Heater/Reboiler Emission Factors**

Point	NOx (lb/MMBTU)	CO (lb/MMBTU)	VOC (lb/MMBTU)
HT-1	0.098	0.082	0.005
HT-3	0.098	0.082	0.005

**Emissions from Regenerator Heater and Reboilers** 

EU ID	Description	escription Rating NOx C		Rating NOx		0	V	OC
		MMBTUH	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
HT-1	Regen. Heater	1.0	0.10	0.43	0.08	0.36	0.01	0.02
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 a condenser with non condensables routed to the reboiler when it is firing, and to the facility inlet when it is not firing. Flash tank off gases are routed to the facility inlet for compression. Glycol dehydrator vent emissions are based on the GRI-GLYCalc program using a gas throughput of 15 MMSCFD and a maximum glycol pump recirculation rate (for the Kimray 21015 PV) of 3.5 gpm. Annual emissions are based on continuous operation.

**Dehydration Unit Emissions** 

Denyuration Chit Emissions				
Parameter	Data			
Calculation Tool	GRI-GLYCalc 4.0			
Dry Gas Flow Rate, MMSCFD	15			
Glycol Pump Type	Gas			
Glycol Pump Design Capacity, gpm	3.5			
Regenerator Still Vent				
Condenser Temperature, °F	90°			
Condenser Pressure, psig	14.7			
Control Type	Condenser			
Condenser Efficiency, % for VOC	85			
Combustion Efficiency at Reboiler, %	50			
VOC Emissions, TPY	1.28			
Flash Tank				
Flash Tank Temperature, °F	140°			
Flash Tank Pressure, psig	40			
Control Type or Recycle	Facility Inlet			
Control Efficiency, %	90			
VOC Emissions, TPY	13.52			
<b>Total Emissions</b>				
VOC, TPY	14.80			

#### AMINE UNIT

The amine unit removes CO<sub>2</sub> from the (liquid) NGL. Since the NGL is "sweet", as is the gas processed by the plant, there are negligible expected H<sub>2</sub>S emissions and a relatively small amount VOC emissions from the NGL amine vent. H<sub>2</sub>S emissions are based on mass balance calculations using the permitted inlet concentration (5.5 ppm), the facility throughput, and assuming all H<sub>2</sub>S is emitted. VOC and H<sub>2</sub>S emissions were calculated as indicated below.

#### **Amine Unit Parameters**

Still Vent	AMINE
Inlet Acid Gas, MMSCFD	15
Calculation Tool	ProMax
Temperature, degrees F	24
Pressure, psig	200
Amine Circulation Rate, gpm	24
Inlet H <sub>2</sub> S Concentration, ppm*	5.3
Type of Control	None
VOC Control Efficiency, %	None
Amine Flash Tank	None
<b>Emissions, TPY</b>	
VOC	2.53
H <sub>2</sub> S (based on 0.3 lb/hr limit)**	1.30

<sup>\*</sup>overly conservative to show compliance with 0.3 lb/hr limit. The two-year average of H<sub>2</sub>S concentration (2018-2019) is calculated at 0.95 ppm.

#### **TANKS**

Emissions from storage tanks were estimated using the EPA software TANKS4.09d using a total condensate throughput of 17,617 bbl/year, molecular weight of 49, and an average vapor pressure of 6.1 psia. Flash emissions were calculated using the Vazquez-Beggs correlation using default parameters.

**Vasquez-Beggs Inputs** 

· · · · · · · · · · · · · · · · · · ·					
Parameter	Condensate				
API Gravity	78				
Separator Pressure (psig)	15				
Separator Temperature (°F)	60				
Stock Tank Barrels of Oil Per Day (BOPD)	48.26				
Gas Molecular Weight (lb/lb-mol)	49				
Separator Gas Specific Gravity	0.9				
Fraction VOC in Tank Gas	0.8				
Atmospheric Pressure (psia)	14.7				

<sup>\*\*</sup>per compliance requirements of OAC:252-100-31-26.

TK-2 and TK-3 Emissions

Parameter	EU-TK-2	EU-TK-3
Throughput, gal/yr	369,957	369,957
Flash Calculation Method/Tool	Vasquez-Beggs	Vasquez-Beggs
Flashing Emissions	14.50	14.50
Working/Breathing Method/Tool	AP-42 (11/06), Section 7.1	AP-42 (11/06), Section 7.1
Working Emissions	1.57	1.57
Breathing Emission	0.73	0.73
Control Type	None	None
VOC Emissions, TPY	16.80	16.80

#### **LOADING**

Loading emissions are based on AP-42 (3/98), Chapter 5.2, using a condensate throughput of 17,617 bbl/year. The molecular weight of 66 and a vapor pressure of 5.45 psia used in the equation are based on AP-42 (11/06) Chapter 7.1, Table 7.1-2.

**Loading Parameters and Emissions (TL-1)** 

Parameter	EU-LOAD
Liquids Loaded	Condensate
Throughput, gal/yr	739,922
Saturation Factor	0.6
Temp., °F	59.96
TVP, psia	5.45
MW, lb/lbmol	66
VOC, wt.%	100
Emission Factor, lb/10 <sup>3</sup> gal	5.15
VOC Emissions, TPY	1.90

# **VENT**

Atmospheric vent (ATMV-1) emissions were based on an annual gas volume vented of 80 MMscf with 0.1% VOC.

#### **Vent Emissions**

EU	MMscf/yr	scf/lb-mol	lb/lbmole	total	wt%	VO	OC
EU	WIWISCI/yi	SCI/ID-IIIOI	ib/ibiliole	lb/year	VOC	lb/year	TPY
ATMV-1	80	379.4	66	91,400	0.1	9,140	4.57

#### **FUGITIVES**

Fugitive 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.

**Fugitive Emissions** 

Point	VOC, TPY
Fugitives	6.72

# FACILITY-WIDE EMISSIONS

**Total Criteria Pollutant Emissions** 

EU	N	Ox	1	CO		OC
	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-TEGV-2				1	0.29	1.28
EU-TEGF-2					3.09	13.52
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						2.53
EU-TK-2				1		16.80
EU-TK-3				1		16.80
EU-TK-12				1	0.01	0.01
EU-TK-13				1	1.00	0.01
TL-1						1.90
ATMV-1						4.57
Fugitives					1.50	6.72
Totals	77.70	340.28	88.51	387.76	20.45	127.82

# **HAP Emissions from the Engines**

The primary HAP emitted from the engines is HCHO. Emissions of HCHO are based on AP-42 (7/00), Section 3.2. A 75% control is assumed for the catalytic converters.

**HCHO Emissions from Engines** 

		Heat	Emission	HC	НО
EU	Description	Input, MMBTUH	Factor lb/MMBTU	lb/hr	TPY
EU-CM-2322	White-Superior 12G825	8.4	0.0205	0.17	0.75
EU-CM-2323	Waukesha L7042GSI w/CC	7.8	0.0205	0.16	0.70
EU-CM-2324	Waukesha L7042GSI w/CC	7.8	0.0205	0.16	0.70
EU-CM-2325	Waukesha L7042GSI w/CC	7.8	0.0050	0.04	0.18
EU-CM-2819	Waukesha L7042GSI w/CC	7.8	0.0205	0.16	0.70
TOTALS				0.69	3.03

# **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 October 11, 2019. The emissions were calculated using GLYCalc 4.0 based on a maximum gas throughput of 15 MMSCFD, a maximum glycol circulation rate of 3.5 gpm. The following table lists estimates of HAP based on an estimate of 90% control from the condenser and flash tank.

**HAP Emissions from the TEG Dehydration unit and Flash Tank** 

		Emissions		
HAP	CAS#	lb/hr	TPY	
Benzene	71432	0.04	0.19	
Toluene	108883	0.11	0.48	
Xylenes	1330207	0.007	0.03	
n-Hexane	110543	0.17	0.76	
Totals		0.33	1.46	

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

#### SECTION V. PSD APPLICABILITY ANALYSIS

The application for Permit No. 2015-1174-C (M-2) was received on February 6, 2020. The updated and revised information was received on October 1, 2020. The purpose of the modification is to add one (1) natural gas-fired compressor engine and incorporate emission limits for "grandfathered" engine CM-2323. Baseline actual emissions (BAE) from the facility are based on historical actual emissions (2018-2019) for criteria pollutants. BAE for new units are equal to zero. Projected Actual Emissions (PAE) from the natural gas-fired compress or engine, amine unit and associated reboiler, and fugitive emissions are based on the Potential Emissions (PTE). PM<sub>10</sub>/PM<sub>2.5</sub>, H<sub>2</sub>S, and SO<sub>2</sub> emissions are not addressed here because they are negligible at this facility. The amine unit vent that was not addressed in previous permits has also been added in this analysis. The project only increases are less than the PSD thresholds and therefore no further analysis is required.

Note that in 2019, CM-3 reached its end of life. It was replaced with a newer like-kind unit and renamed CM-2324. There were no associated emission increases with this end-of-life replacement. The previous project is not connected to this modification.

Baseline Actual Emissions (BAE) for Affected EU

		Emissions (TPY)					
EU	<b>Unit/Process</b>	N	$O_x$	C	O	V	OC
		2018	2019	2018	2019	2018	2019
CM-2322	CM-2322	200.41	207.00	200.41	207.00	22.27	23.00
CM-2323	CM-2323	205.99	212.79	205.99	212.79	22.89	23.64
CM-2324	CM-2324		3.822		19.24	1	0.47
CM-2325	CM-2325	22.74	13.75	34.10	20.62	4.55	2.75
TEGV-1	TEGV-1					0.34	0.87
TK-2	TK-2					0.00	1.31
TK-3	TK-3					8.45	5.88
TL-1	TL-1					0.66	0.66
Fugitives	Process Fugitives					14.64	14.64
<b>Baseline Actual Emissions</b>		429.13	437.36	440.50	459.65	73.78	73.21
Two year avera	age	43:	5.16	459	.69	73	3.73

**Projected Actual Emissions (PAE) for Affected EU** 

1 Tojecteu Actua	Difficulty (1	ill) for threet	eu Le
Unit	NO <sub>x</sub> (TPY)	CO (TPY)	VOC (TPY)
CM-2322 <sup>1</sup>	208.57	208.57	23.17
CM-2323 <sup>1</sup>	35.69	47.59	11.90
CM-2324 <sup>1</sup>	35.69	47.59	11.90
CM-2325 <sup>1</sup>	23.78	35.70	4.77
CM-2819 <sup>1</sup>	35.69	47.59	11.90
TEGV-1 / TEGF-1			14.80
TK-2			0.82
TK-3			8.96
TL-1			0.82
Fugitives <sup>1</sup>			15.37
AMINE <sup>1</sup>			2.53
HT-3 <sup>1</sup>	0.40	0.08	0.04
Subtotal	339.82	387.11	106.98

<sup>&</sup>lt;sup>1</sup> PAE is based on PTE.

Project Only Increases	– PSD AP	pucability	Anaiysis
	NOx	CO	VOC
	(TPY)	(TPY)	(TPY)
BAE	433.27	450.075	73.497
PAE	339.82	387.11	121.78
PAE-BAE	-95.34	-72.58	33.23
<b>PSD Significance Levels</b>	40	100	40
Subject to PSD Review?	No	No	No

**Project Only Increases – PSD Applicability Analysis** 

As shown in the table above, this proposed modification is not subject to PSD review.

#### SECTION VI. 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.

- 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 0.375 MMBTUH glycol reboiler, a 1.0 MMBTUH mole sieve regeneration heater, a 1.0 MMBTUH emergency flare, and a 1.0 MMBTUH amine reboiler.
- 2. \*Storage tank with less than or equal to 10,000 gallons capacity that store volatile organic liquids with a true vapor pressure less than or equal to 1.0 psia at maximum storage temperature. Glycol, amine, and lube oil storage tanks all have capacities less than 10,000 gallons and store liquids with a vapor pressure below 1.0 psia.
- 3. 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 (17,617 bbl) is equivalent to 2,027 gallons per day.
- 4. \* 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. Tanks TK-2 and TK-3 have capacities less than the 420,000 gallon threshold, but their VOC emissions will exceed 5 TPY a piece.
- 5. 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.
- 6. 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.

- 7. 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.
- 8. 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 VII. 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]

<u>Part 5</u> 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 AQD and may require a permit modification. Insignificant activities refer to those individual emission units either listed in Appendix I or whose actual calendar year emissions do not exceed the following limits.

- 5 TPY of any one criteria pollutant
- 2 TPY of any one hazardous air pollutant (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 for all the sources are taken from the permit application and previous permit.

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 (PM))

[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. Appendix C specifies a PM emission limitation for fuel-burning equipment based on heat input rating. 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	8.4	0.60	0.0099
P-CM-2323	7.8	0.60	0.0099
P-CM-2324	7.8	0.60	0.0099
P-CM-2325	7.8	0.60	0.0099
P-CM-2819	7.8	0.60	0.0099
P-HT-1	1.0	0.60	0.0076
P-HT-3	1.0	0.60	0.0076
Amine Reboiler	1.0	0.60	0.0076

# 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 limits the ambient air impact of hydrogen sulfide ( $H_2S$ ) emissions from any new or existing source to 0.2 ppm for a 24-hour average (equivalent to 280  $\mu g/m^3$ ). Based on modeling conducted for the general permit for oil and gas facilities, a single uncontrolled amine unit (still vent routed to the atmosphere) treating "sweet" (<4 ppmv  $H_2S$ ) natural gas at a minor facility will be in

compliance with the  $H_2S$  ambient air concentration limit. Also, since the ambient impacts of  $H_2S$  from the engines, heaters, and boilers is so low, and there are no significant emissions of  $H_2S$  from the condensate or "sweet" crude oil storage, the facility as a whole would be in compliance with the  $H_2S$  ambient air concentration limit.

<u>Part 5</u> 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 343 ppmv to ensure compliance with Subchapter 31.

<u>Part 5</u> requires that H<sub>2</sub>S 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<sub>2</sub> prior to being emitted to the ambient air. This requirement shall not apply if a facility's emissions of H<sub>2</sub>S do not exceed 0.3 lb/hr, two-hour average. Oxidation of the H<sub>2</sub>S must be conducted in a system that assures at least a 95% reduction of the H<sub>2</sub>S in the exhaust gases and that is equipped with an alarm system that signals a malfunction for all thermal devices used to control H<sub>2</sub>S emissions from petroleum and natural gas processing facilities.

This part also 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 precontrolled  $H_2S$  emissions at the facility's inlet once per calendar quarter. Inlet  $H_2S$  concentrations below 5.3 ppm at the plant capacity of 15 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 NOx 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]

<u>Part 3</u> 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 and methanol tanks have submerged fill pipes, therefore, comply with Part 3.

<u>Part 5</u> 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.

<u>Part 7</u> requires fuel-burning equipment to be operated and maintained so as to minimize VOC emissions. Temperature and available air must be sufficient to provide essentially complete combustion. The engines are designed to provide essentially complete combustion of organic materials.

<u>Part 7</u> 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 toxic air contaminants (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:

The following Omanoma in I	the following original first original control states are not applicable to anstructive.						
OAC 252:100-11	Alternative Reduction	not eligible					
OAC 252:100-15	Mobile Sources	not in source category					
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 VIII. FEDERAL REGULATIONS

PSD, 40 CFR Part 52 [Applicable]

Total existing potential emissions of NO<sub>x</sub> 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 NOx, 40 TPY SO<sub>2</sub>, 15 TPY PM<sub>10</sub>, 10 TPY PM<sub>2.5</sub>, and 40 TPY VOC.

NSPS, 40 CFR Part 60

[Subpart JJJJ Applicable]

<u>Subpart Kb</u>, VOL Storage Vessels. This subpart regulates hydrocarbon storage tanks larger than 19,813 gallons capacity and built after July 23, 1984. There are no tanks larger than the threshold of applicability.

<u>Subpart GG</u>, Stationary Gas Turbines. The compressors here are powered by reciprocating engines.

<u>Subpart VV</u>, Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry. The equipment is not in a SOCMI plant.

<u>Subpart KKK</u>, Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. This subpart regulated natural gas processing plants which were constructed, modified, or reconstructed after January 20, 1984, and prior to August 23, 2011. This plant was constructed in 1976, prior to the effective date of Subpart KKK and was not modified or reconstructed during the effective dates of this subpart.

<u>Subpart LLL</u>, Onshore Natural Gas Processing: SO<sub>2</sub> Emissions. 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.

<u>Subpart IIII</u>, 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 was published in the Federal Register on January 18, 2008. It 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 richburn, fuel type, duty (emergency or non-emergency), and manufacture date. Engines with a maximum engine power greater than or equal to 500 HP except lean burn engines with a maximum engine power greater than or equal 500 HP and less than 1,350 HP manufactured on or after July, 1 2007 are subject to Subpart JJJJ. 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. The proposed engine (CM-2819) was manufactured prior to July 1, 2007. All other engines (except EU-CM-2324) were also manufactured prior to July 1, 2007 and are not subject to any requirements under subpart JJJJ. EU-CM-2324 was remanufactured in 2019, therefore, is subject to this subpart. All applicable requirements have been incorporated into the permit.

<u>Subpart OOOO</u>, Crude Oil and Natural Gas Production, Transmission, and Distribution. This subpart affects the following onshore affected facilities that commence construction, reconstruction, or modification after August 23, 2011, but prior to September 18, 2015.

- 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 that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment.
- 3. Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment.
- 4. Each pneumatic controller affected facility, which is:
  - a. For the oil production segment (between the wellhead and the point of custody transfer to an oil pipeline): a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 SCFH.
  - b. For the natural gas production segment (between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not including natural gas processing plants): a single continuous bleed natural gasdriven pneumatic controller operating at a natural gas bleed rate greater than 6 SCFH.
  - c. 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 located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment that emit more than 6 TPY and revising the definition to only include those storage vessels
- 6. The group of all equipment, except compressors, within a process unit is an affected facility.
  - a. Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.
  - b. Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§ 60.5400, 60.5401, 60.5402, 60.5421, and 60.5422 if it is located at an onshore natural gas processing plant.
- 7. Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.
  - a. Each sweetening unit that processes natural gas is an affected facility; and
  - b. Each sweetening unit that processes natural gas followed by a sulfur recovery unit is an affected facility.
  - c. Facilities that have a design capacity less than 2 long tons per day (LT/D) of hydrogen sulfide ( $H_2S$ ) in the acid gas (expressed as sulfur) are required to comply with recordkeeping and reporting requirements specified in \$60.5423(c)\$ but are not required to comply with \$60.5405\$ through 60.5407 and \$60.5410(g)\$ and \$60.5415(g)\$ of this subpart.

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

For each new reciprocating compressor the owner/operator must replace the rod packing before 26,000 hours of operation or prior to 36 months. If utilizing the number of hours, the hours of operation must be continuously monitored. Commenced construction is based on the date of installation of the compressor (excluding relocation) at the facility. The compressor associated with the proposed engine (EU-CM-2819) and all other compressors at the facility were manufactured prior to August 23, 2011, and have not been modified or reconstructed during the applicability dates. Therefore, they are not subject to this subpart.

No new continuous bleed natural gas-driven pneumatic controllers have been or will be installed.

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. All storage vessels are considered existing, have not been modified or reconstructed, and are not subject to this subpart.

The group of all equipment, except compressors, within a process unit at a natural gas processing plant must comply with the requirements of NSPS, Subpart VVa, except as provided in §60.5401. All process units are considered existing and are not subject to this subpart.

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, and is not subject to the standards for sweetening units.

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

<u>Subpart OOOOa</u>, Crude Oil and Natural Gas Facilities. This subpart regulates equipment at crude oil and natural gas facilities that commenced construction, reconstruction, or modification after September 18, 2015.

The compressor associated with engine EU-CM-2819 was constructed prior to September 18, 2015, and has not been modified or reconstructed. All other equipment at the facility was also constructed prior to this date and have not been modified or reconstructed. The facility is therefore not subject to this subpart.

# 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]

<u>Subpart HH</u>, 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.

<u>Subpart ZZZZ</u>, 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). Engine, EU-CM-2324, was re-manufactured in 2019, and is considered "new" affected source under this subpart. This engine will be required to comply with NSPS, Subpart JJJJ to meet the compliance requirements of NESHAP, Subpart ZZZZ.

The proposed engine (EU-CM-2819) was manufactured prior to June 12, 2006. All other engines (except EU-CM-2324) at this facility were also constructed prior to June 12, 2006, and are affected sources as "existing" units. 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.

<b>Engine Category</b>	
Remote	Requirements
Existing Non-Emergency,	Change oil and filter every 2,160 hours of operation or annually,
Non-Black Start, 4SRB &	whichever comes first
4SLB HP > 500-hp	Inspect spark plugs every 2,160 hours of operation or annually,
	whichever comes first, and replace as necessary; and
	Inspect all hoses and belts every 2,160 hours of operation or
	annually, whichever comes first, and replace as necessary.

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), as published in the Federal Register on October 22, 1997, 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:

- It is subject to an emission limit or standard for an applicable regulated air pollutant
- It uses a control device to achieve compliance with the applicable emission limit or standard
- 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, and EU-CM-2325) have uncontrolled emissions of NOx and CO above 100 TPY and are subject to CAM. Engine (EU-CM-2324) also has uncontrolled emissions greater than major source thresholds but the engine is subject to NO<sub>X</sub> and CO emission limits of NSPS which are exempt from CAM. Specifications for CAM for the applicable units have been incorporated into the permit.

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: <a href="https://www.epa.gov/rmp">www.epa.gov/rmp</a>.

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).

<u>Subpart A</u> 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.

<u>Subpart F</u> 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 IX. COMPLIANCE

#### Tier Classification and Public Review

This application has been determined to be a **Tier II** based on the fact that the permittee is making 'significant modifications' to their existing major source facility. 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 has a current lease given 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: <a href="http://www.deq.ok.gov">http://www.deq.ok.gov</a>.

The applicant will publish the "Notice of Filing a Tier II Application" and the "Notice of Tier II Draft Permit" in a local newspaper in the Caddo County, Oklahoma. The notices will state that the application and the draft permit may be reviewed at the DEQ Air Quality Division's Main Office in Oklahoma City, Oklahoma. The application and draft permit will also be available for review on the Air Quality section of the DEQ web page at <a href="http://www.deq.ok.gov">http://www.deq.ok.gov</a>.

The proposed permit will be forwarded to EPA Region VI for a 45-day review.

Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web page: <a href="http://www.deq.ok.gov/">http://www.deq.ok.gov/</a>.

#### Fee Paid

A Part 70 construction permit application fee of \$5,000 has been paid.

# **SECTION X. SUMMARY**

The applicant has demonstrated the ability to comply with the requirements of the applicable Air Pollution Control 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 modified construction permit is recommended, contingent on public review and the EPA review.

# PERMIT TO CONSTRUCT AIR POLLUTION CONTROL FACILITY SPECIFIC CONDITIONS

# Mustang Gas Products LLC Binger Gas Plant

Permit No. 2015-1174-C (M-2)

The permittee is authorized to construct in conformity with the specifications submitted to Air Quality on February 6, 2020. The Evaluation Memorandum dated October 1, 2020, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Commencing construction or 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 2

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

#### **EUG-2:** Exempted Compressor Engine

This emission group consists of an exempt source. There are no emission limits applied to this unit under Title V but it is limited to the existing equipment as it is.

No exempted compressor engine is located at the facility.

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

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

EU	N	NOx		CO		OC
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-2819	8.15	35.69	10.86	47.59	2.72	11.90
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-2325	5.43	23.78	8.15	35.70	1.09	4.77

- (a) CM-2819, CM-2323, and CM-2325 shall be operated with an automatic air/fuel ratio controller and with exhaust gases passing through a properly functioning catalytic converter.
- (b) CM-2819, CM-2322, CM-2323, and CM-2325 are subject to NESHAP Subpart ZZZZ, and shall comply with all applicable requirements.

#### EUG-3B Permitted Engine (Subject to NSPS Subpart JJJJ)

EU	Point	Description	HP
EU-CM-2324	P-CM-2324	Waukesha L7042GSI w/CC	1,232

EU	NO	Ox	C	O	VO	OC
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-2324	8.15	35.69	10.86	47.59	2.72	11.90

- (a) CM-2324 shall be operated with an automatic air/fuel ratio controller and with exhaust gases passing through a properly functioning catalytic converter.
- (b) CM-2324 is subject to NSPS Subpart JJJJ and NESHAP Subpart ZZZZ, and shall comply with all applicable requirements.

**EUG-4A** Glycol Regenerator Vent

Tr I	Doint	Description	Construction	VOC E	missions
EU	EU Point		Date	lb/hr	TPY
EU-TEGV-2	P-TEGV-2	Still Vent	2008	0.29	1.28
EU-TEGF-2	P-TEGF-2	Flash Tank	2008	3.09	13.52

- (a) The lean glycol recirculation rate of the glycol dehydration unit shall not exceed 3.5 gallons per minute.
- (b) The natural gas throughput of the glycol dehydration unit shall not exceed 15 MMSCFD based on a monthly average.
- (c) Off gasses from the still vent shall be processed by a condenser with at least 85% control efficiency, with uncondensed gasses sent to the reboiler for fuel when it is firing with at least 50% control efficiency, and to the facility inlet when it is not firing.
- (d) Off gasses from the flash tank shall be sent to the facility inlet for recompression.
- (e) Records of benzene emissions shall be kept per 40 CFR Part 63, Subpart HH.

#### **EUG-4B** Glycol Reboiler

Glycol Reboiler emissions are insignificant

EU	Point	Description	Construction Date
EU-TEGH-2	P-TEGH-2	0.375 MMBTUH Firetube Reboiler	2008

#### **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	Regeneration Heater	1.0

#### **EUG-6A** Condensate Storage Tanks

EU	Point	Description	Capacity, Gallons	VOC Emissions, TPY
EU-TK-2	P-TK-2	Condensate Tank	8,820	33.60
EU-TK-3	P-TK-3	Condensate Tank	8,820	33.00

(a) Throughput of the two condensate tanks shall not exceed a combined total of 17,617 barrels per year, 12-month rolling total.

# **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-4	P-TK-4	Lube Oil Tank	6,000
EU-TK-5	P-TK-5	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-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-7** Miscellaneous Process Piping Fugitives

Emissions from the fugitive VOC leakage components do not have a specific limitation.

Component	Service	Components #
Valves	Gas/Vapor	896
Pump Seals	Light Liquid	3
Compressor Seals	All	16
Relief Valves	All	45
Screwed Connections	All	4,534

#### **EUG 8** Equipment Blowdowns

Emissions from the atmospheric vent are insignificant and do not have a specific limitation.

EU	Point	Equipment	MMSCF/YR
ATMV-1	ATMV-1	Atmospheric Vent	

#### **EUG-9** Amine Unit

#### Amine Unit Vent

EU	Point	Description	<b>VOC Emissions, TPY</b>
AMINE	AMINE	Amine Unit Vent	2.53

Emissions of H<sub>2</sub>S 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 H<sub>2</sub>S emissions:
  - (i) Inlet H<sub>2</sub>S concentration shall not exceed 5.3 ppm. At a plant capacity of 15 MMSCFD, assuming an outlet H<sub>2</sub>S concentration of "0," an inlet concentration of 5.3 will keep the H<sub>2</sub>S 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 H<sub>2</sub>S emissions if inlet H<sub>2</sub>S is shown to exceed 5.3 ppm:
  - (i) Monitor the facility inlet flowrate continuously with an alarm set point as calculated below: [40 CFR §60.647(c), OAC 252:100-31-26]

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

$$(C_{inlet} - C_{outlet}, ppmv)(34 \text{ lb H}_2\text{S}/\text{lbmol})$$

- (ii) Q<sub>inlet</sub> will be evaluated on a two-hour rolling average,
- (iii) The calculations shall be based on quarterly tested H<sub>2</sub>S 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<sub>inlet</sub> 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	17,617

- 2. The fuel-burning equipment shall be fired with pipeline grade natural gas or other gaseous fuel with a sulfur content less than 343 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  $(H_2S)$  content of the natural gas at the inlet of the plant. [OAC 252:100-43]
- 4. Upon issuance of an operating permit, 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. At least once per calendar quarter, the permittee shall conduct tests of NO<sub>x</sub> and CO emissions in exhaust gases from engines CM-2322, CM-2323, CM-2325, and CM-2819 in EUG-3A, and CM-2324 in EUG 3B, and from each replacement engine when operating under representative conditions for that period. Testing is required for any engine that runs for more than 220 hours during that calendar quarter. A quarterly test may be conducted no sooner than 20 calendar days after the most recent test. Testing shall be conducted using 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 Air Quality. When four consecutive quarterly tests show the engine to be in compliance with the emissions limitations shown in the permit, then the testing frequency may be reduced to semi-annual testing. A semi-annual test may be conducted no sooner than 60 calendar days nor later than 180 calendar days after the most recent test. Likewise, when the following two consecutive semi-annual tests show compliance, the testing frequency may be reduced to annual testing. An annual test may be conducted no sooner than 120 calendar days nor later than 365 calendar days after the most recent test. Upon any showing of non-compliance with

emissions limitations or testing that indicates that emissions are within 10% of the emission limitations, the testing frequency shall revert to quarterly. Reduced testing frequency does not apply to engines with catalytic converters. [OAC 252:100-8-6 (a)(3)(A)]

- 7. 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)]
- 8. 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]
- 9. The permittee is authorized to replace any internal combustion engine with emissions limitations specified in this permit with an engine that meets the following requirements:

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

- (a) The replacement engine shall comply with the same emissions limits as the engine that it replaced. This applies to lb/hr and TPY limits specified in this permit.
- (b) The authorization of replacement of an engine includes temporary periods of 6 months or less for maintenance purposes.
- (c) The permittee shall notify AQD in writing not later than 7 days prior to start-up of the replacement engine. Said notice shall identify the old engine and shall include the new engine make and model, serial number, horsepower rating, and pollutant emission rates (g/hp-hr, lb/hr, and TPY) at maximum horsepower for the altitude/location.
- (d) Quarterly emissions tests for the replacement engine(s) shall be conducted to confirm continued compliance with NO<sub>X</sub> and CO emission limitations. A copy of the first quarter testing shall be provided to AQD within 60 days of start-up of each replacement engine. The test report shall include the engine fuel usage, stack flow (ACFM), stack temperature (°F), and pollutant emission rates (g/hp-hr, lbs/hr, and TPY) at maximum rated horsepower for the altitude/location.
- (e) Replacement equipment and emissions are limited to equipment and emissions which are not a modification under NSPS or NESHAP.
- (f) Replacement equipment and emissions are limited to equipment and emissions which are not a modification or a significant modification under PSD. For existing PSD facilities, the permittee shall calculate the PTE or the net emissions increase resulting from the replacement to document that it does not exceed significance levels and submit the results with the notice required by paragraph (c) of this Specific Condition. The permittee shall attach each such notice to their copy of the relevant 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 described in OAC 252:100-8-6(d) does not apply to any change made pursuant to this paragraph.
- (g) Engines whose installation and operation are authorized under this Specific Condition which are subject to 40 CFR Part 63, Subpart ZZZZ and/or 40 CFR Part 60, Subpart JJJJ shall comply with all applicable requirements.

- 10. 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?
- 11. 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 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.
- 12. 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.
  - (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?
  - (1) § 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?

- 13. 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)]
- 14. 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) Tanks smaller than 10,000 gallons: capacity and materials stored.
- (b) Glycol reboiler, regeneration heater, emergency blowdown, amine reboiler, condensate loading, emergency flare: emissions calculations.
- 15. Compliance Assurance Monitoring (CAM) Requirements and Specifications for Engines EU-CM-2323, EU-CM-2325 and EU-CM-2819 are as follows:

	Indicator No. 1	Indicator No. 2	Indicator No. 3*	Indicator No 4*
I. Indicator	O <sub>2</sub> from engines	Pressure drop across	Temperature of	Temperature of
		the catalyst.	exhaust gas into	exhaust gas out of
			catalyst.	catalyst.
Measurement	O <sub>2</sub> concentration into	Pressure drop across	Exhaust gas	Exhaust gas
Approach	the catalyst is	the catalyst beds is	temperature is	temperature is
	measured	measured monthly	measured	measured
	continuously using an	using a differential	continuously using an	continuously using
	in-line O <sub>2</sub> sensor.	pressure gauge or a	in-line thermocouple.	an in line
TT T 11	FD1 11 11 11 11 11 11 11 11 11 11 11 11 1	water manometer.	FD1 11 11 1	thermocouple.
II. Indicator Range	The indicator is	The indicator range is a	The indicator range is	The indicator range
	alarm-based. The indicator range is no	pressure drop deviation of less than 2 in. H <sub>2</sub> O	above 750°F, but lower than 1,250°F.	is above 800°F, but lower than 1,300°F.
	alarmed event lasting	from the benchmark.	Excursions trigger	Excursions trigger
	30 minutes or longer.	Excursions trigger	corrective action,	corrective action,
	Excursions trigger	corrective action,	logging and reporting	logging and
	corrective action,	logging and reporting	in semiannual report.	reporting in
	logging and reporting	in semiannual report	in semantan report.	semiannual report.
	in semiannual report.			
III. Performance	•			
Criteria				
A. Data	Observations are	Pressure drop across	Temperature is	Temperature is
Representa-	performed at the	the catalyst is measured	measured at the inlet	measured at the
tiveness	engine exhaust while	at the catalyst inlet and	to the catalyst by a	outlet of the catalyst
	the engine is	exhaust. The minimum	thermocouple. The	by a thermocouple.
	operating.	accuracy of the device	minimum accuracy is	The minimum
		is $\pm 0.25$ in. H <sub>2</sub> O.	±5°F.	accuracy is ±5°F.
B. QA/QC –	O <sub>2</sub> sensor replaced	Pressure gauge	Thermocouple	Thermocouple
Practices and	quarterly.	calibrated quarterly.	visually checked	visually checked
Criteria		Pressure taps checked	quarterly and tested	quarterly and tested
C M :		monthly for plugging.	annually.	annually.
C. Monitoring	O <sub>2</sub> percent monitored	Pressure drop is	Temperature is	Temperature is
Frequency	continuously.	measured monthly.	measured	measured
			continuously.	continuously.

		Indicator No. 1	Indicator No. 2	Indicator No. 3*	Indicator No 4*
D.	Data	Records are	Records are maintained	A strip chart records	A strip chart records
	Collection	maintained to	to document monthly	the temperature	the temperature
	Procedures	document alarmed	readings and any	continuously or an	continuously or an
		events and any	required maintenance.	operator or computer	operator or
		required maintenance.		may record at least	computer may
				once per day.	record at least once
					per day.
E.	Averaging	None, not to exceed	None, not to exceed	None, not to exceed	None, not to exceed
	period	maximum.	maximum.	minimums and	minimums and
				maximums.	maximums.

<sup>\*</sup>Minimum requirement is to include at least one of these two indicators.

- (a) §64.1 Definitions.
- (b) §64.2 Applicability.
- (c) §64.3 Monitoring design criteria.
- (d) §64.4 Submittal requirements.
- (e) §64.5 Deadlines for submittals.
- (f) §64.6 Approval of monitoring.
- (g) §64.7 Operation of approved monitoring.
- (h) §64.8 Quality improvement plan (QIP) requirements.
- (i) §64.9 Reporting and recordkeeping requirements.
- 16. This facility is considered an existing Prevention of Significant Deterioration (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)]
- 17. 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 "grandfathered" engine in EUG 2.
  - (b) O&M records for each engine, if operated less than 220 hours per quarter and not tested.
  - (c) Periodic testing (NO<sub>x</sub> and CO) for engines CM-2322, CM-2323, CM-2325, and CM-2819 in EUG-3A, and CM-2324 in EUG 3B or replacements.
  - (d) For the fuel(s) burned, the appropriate document(s) as described in Specific Condition No. 2.
  - (e) Condensate throughput (monthly and 12-month rolling totals).
  - (f) Records required by Specific Condition No. 15 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 H<sub>2</sub>S concentration (quarterly).
  - (j) Natural gas throughput of the amine unit (MMSCFD, monthly average).
  - (k) Records as required by 40 CFR Part 60, Subpart JJJJ.
  - (1) Records as required by 40 CFR Part 63, Subparts HH and ZZZZ.

- (m) Records required per OAC 252:100-8-36.2(c) to show that the emission increases do not exceed to PSD significance levels.
- 18. The permittee shall submit a request for modification of the current Title V operating permit within 180 days of commencement of operations of the proposed project.

# MAJOR SOURCE AIR QUALITY PERMIT STANDARD CONDITIONS (June 21, 2016)

#### 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 C.F.R. §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, Excess Emission Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. 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), 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

("NESHAPs") 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 C.F.R. §§60.7 and 63.10, 40 CFR Parts 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 (PM<sub>10</sub>). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).
- K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 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. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance. [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. The affirmative defense of emergency 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, the DEQ, and the EPA 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 C.F.R., 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 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 airtight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.

  [40 CFR 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 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. TITLE V APPROVAL LANGUAGE

A. DEQ wishes to reduce the time and work associated with permit review and, wherever it is not inconsistent with Federal requirements, to provide for incorporation of requirements established through construction permitting into the Source's Title V permit without causing redundant review. Requirements from construction permits may be incorporated into the Title V permit through the administrative amendment process set forth in OAC 252:100-8-7.2(a) only if the following procedures are followed:

- (1) The construction permit goes out for a 30-day public notice and comment using the procedures set forth in 40 C.F.R. § 70.7(h)(1). This public notice shall include notice to the public that this permit is subject to EPA review, EPA objection, and petition to EPA, as provided by 40 C.F.R. § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.
- (2) A copy of the construction permit application is sent to EPA, as provided by 40 CFR § 70.8(a)(1).
- (3) A copy of the draft construction permit is sent to any affected State, as provided by 40 C.F.R. § 70.8(b).
- (4) A copy of the proposed construction permit is sent to EPA for a 45-day review period as provided by 40 C.F.R.§ 70.8(a) and (c).
- (5) The DEQ complies with 40 C.F.R. § 70.8(c) upon the written receipt within the 45-day comment period of any EPA objection to the construction permit. The DEQ shall not issue the permit until EPA's objections are resolved to the satisfaction of EPA.
- (6) The DEQ complies with 40 C.F.R. § 70.8(d).
- (7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8(a).
- (8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.
- (9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3(a), (b), and (c), and by EPA as provided in 40 C.F.R. § 70.7(f) and (g).
- (10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.
- B. To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.

#### SECTION XXII. 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]



# PART 70 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. 2015-1174-C (M-2)

Mustang G	<b>Fas Product</b>	s, LLC,
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having complied with the requirements of the law, is hereby granted permission to construct all the 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 June 21, 2016, 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.

Kendal Stegmann, Division Director	Date



SCOTT A. THOMPSON Executive Director

# OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT Governor

October 1, 2020 Attn: Mr. Steve Hoppe Vice President, Gas Operations Mustang Gas Products, LLC 9800 N. Oklahoma Ave. Oklahoma City, OK 73114-7406

SUBJECT:

Permit Application No. **2015-1174-C** (M-2)

Binger Gas Plant (Facility ID: 1085)

Sec. 26 – T 10N – R11W, Binger, Caddo County, Oklahoma

Dear Mr. Hoppe:

Air Quality Division has completed the initial review of your permit application referenced above. This application has been determined to be a Tier II. In accordance with 27A O.S. § 2-14-302 and OAC 252:004-7-13(c) the enclosed draft permit is now ready for public review. The requirements for public review 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. Provide for public review (for a period of 30 days following the date of the newspaper announcement) a copy of this draft permit on the DEQ website and access to the application through the DEQ website.
- 3. Send to AQD a copy of the proof of publication notice from Item #1 above together with any additional comments or requested changes which you may have on the draft permit.

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 or me at (405) 702-4100.

Sincerely,

Phillip Fielder, P.E. Chief Engineer

AIR QUALITY DIVISION

**Enclosures** 



# NOTICE OF DRAFT PERMIT TIER II or TIER III AIR QUALITY PERMIT APPLICATION

### APPLICANT RESPONSIBILITIES

Permit applicants are required to give public notice that a **Tier II** or **Tier III** draft permit has been prepared by DEQ. The notice must be published in one newspaper local to the site or facility. Upon publication, a signed affidavit of publication must be obtained from the newspaper and sent to AQD. Note that if a public meeting is requested by either the applicant or the public, this must be arranged through the Customer Services Division of the DEQ.

## **REQUIRED CONTENT** (27A O.S. § 2-14-302 and OAC 252:4-7-13(c))

- 1. A statement that a Tier II or Tier III draft permit has been prepared by DEQ;
- 2. Name and address of the applicant;
- 3. Name, address, driving directions, legal description and county of the site or facility;
- 4. The type of permit or permit action being sought;
- 5. A description of activities to be regulated, including an estimate of emissions from the facility;
- 6. Location(s) where the application and draft permit may be reviewed;
- 7. Name, address, and telephone number of the applicant and DEQ contacts;
- 8. Any additional information required by DEQ rules or deemed relevant by applicant;
- 9. A 30-day opportunity to request a formal public meeting on the draft permit.

#### **SAMPLE NOTICE on page 2.**

# 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 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 permit [modification] (Permit Number: ...xx-xxx-x...), which may be reviewed at the Air Quality Division's main office (see address below). The draft permit is also available for review in the Air Quality Section of DEQ's Web Page: http://www.deq.state.ok.us/

This draft permit would authorize the facility to emit the following regulated pollutants (list each pollutant and amounts in tons per year (TPY)).

This public notice shall include notice to the public that this permit is subject to Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 70.8; that the requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process; that the public will not receive another opportunity to provide comments when the requirements are incorporated into the Title V permit; and that EPA review, EPA objection, and petitions to EPA will not be available to the public when requirements from the construction permit are incorporated into the Title V permit.

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. [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/CSD staff.

For additional information, contact ...names, addresses and telephone numbers of contact persons for the applicant, or contact DEQ at: Chief Engineer, Permits Section, Air Quality Division, 707 N. Robinson, Suite 4100, P.O. Box 1677, Oklahoma City, OK, 73101-1677, (405) 702-4100.