DRAFT/PROPOSED

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

MEMORANDUM June 3, 2021

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

THROUGH: Rick Groshong, Compliance and Enforcement Group Manager

THROUGH: Phil Martin, P.E., Engineering Manager, Existing Source Permit Section

THROUGH: Joseph K. Wills, P.E., Engineering Section

FROM: Junru Wang, E.I., Existing Source Permits Section

SUBJECT: Evaluation of Operating Permit **No. 2020-0501-TVR4**

Mustang Gas Products, LLC

Facility: Kingfisher East Compressor Station Facility ID: 1627 (SIC 1311/NAICS 211130)

Section 1, Township 16N, Range 7W, Kingfisher County, OK

Latitude: 35.89824°N, Longitude: 97.89081°W

Directions: From intersection of Highways 81 & 33 in Kingfisher, 3.5 miles east on Highway 33, 3 miles north on county road (N2880 Rd.), and 1.1 miles west on Beebe Rd. The facility is on the south side of the road.

SECTION I. INTRODUCTION

Mustang Gas Products, LLC (Mustang or the applicant) has submitted an application for renewal of the Part 70 operating permit for the Kingfisher East Compressor Station. The facility is currently operating under Permit No. 2015-1865-TVR3 (M-1), issued on March 17, 2020.

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. The facility is a minor source for Prevention of Significant Deterioration (PSD) and an area source of Hazardous Air Pollutants (HAPs).

SECTION II. PROCESS DESCRIPTION

The facility is a natural gas compressor station. Natural gas enters the facility through an inlet separator where it is compressed by two (2) compressor engines and sent to the glycol dehydration unit, which is equipped with a condenser. In the dehydration unit, wet natural gas passes through a contactor vessel in which water is absorbed by triethylene glycol (TEG). The dried natural gas exits the contactor and exits the facility. The glycol containing water is sent to the TEG reboiler where applied heat boils off the water. The still vent is equipped with a condenser where condensed liquids go to a 529-gal processed water tank (TK-1) for storage and the uncondensed vapors are

routed to the reboiler for fuel or to the atmosphere. The flash tank is routed to the facility inlet for recompression. The water lean glycol is routed back into the contactor.

The liquids generated at the inlet separator are piped into two (2) atmospheric condensate storage tanks. The condensate is trucked out for sale. The water tank (TK-9) collects the condensation that occurs during the compression of natural gas.

SECTION III. PERMIT HISTORY

Permits	Date Issued	Description
2015-1865-TVR3	6/7/2016	Third Title V renewal
2015-1865-C (M-1)	6/12/2018	Construction to add two (2) compressor engines and increase the pump size for one (1) glycol dehydration unit.
2015-1865-C (M-2)	5/14/2019	Construction to add (1) condensate tank and increase facility-wide condensate throughput.
2015-1865-TVR3 (M-1)	3/17/2020	Operating permit to incorporate new units whose construction was authorized by Permit No. 2015-1865-C (M-1) and Permit No. 2015-1865-C (M-2). One proposed compressor engine (CM-4) was removed since it was not installed at the facility.

SECTION IV. REQUESTED CHANGES

The applicant has requested to update the controls and lb/hr VOC emissions from the dehydration unit (TEGV) since they were represented incorrectly in the past permits. The emissions have decreased as the result of these changes.

The calculation methodology, throughput, and emissions for the condensate storage tanks (TK-2 and TK-10) and condensate truck loading (LOAD-1) have been adjusted. The VOC emissions have increased as the result of this change. Since TK-2, TK-10, and LOAD-1 are considered insignificant activities and the applicant is not seeking to establish a change in any permit term or condition, this change did not require NSR permitting nor did it trigger the requirement to modify the Title V permit.

No other changes of the current permit have been requested. This permit updates all current rules and regulations and incorporates all updated applicable State of Oklahoma and Federal regulations and requirements.

SECTION V. EQUIPMENT

EUG A. Natural Gas-Fired Internal Combustion Engines

EU	Point	Make/Model	HP	Serial #	Installed Date	Manufacture Date
EU-CM-2833	P-CM-2833	Waukesha L7042 GU	588	191567	1978	1978
EU-CM-2818	P-CM-2818	Waukesha L7042 GSI ⁽¹⁾	1,232	220789	2018	2005

⁽¹⁾ Equipped with NSCR.

EUG B. Storage Tanks

EU	Point	Capacity (gal.)	Material Stored	Construction Date
	P-TK-1	529	Processed Water	1978
	P-TK-2	8,820	Condensate	1978
	P-TK-10	12,600	Condensate	1987
	P-TK-3	4,536	Lube Oil	1978
EU-TK	P-TK-4	565	Methanol	1978
	P-TK-5	518	Antifreeze	1978
	P-TK-5(1)	300	Antifreeze	1978
	P-TK-6	565	Triethylene Glycol	1978
	P-TK-9	2,268	Water Tank	1978

EUG C. Fugitives

EU	Point	Type of Equipment	Date Installed
EU-FUG	EU-FUG-1	Process Piping Fugitives	1978
EU-LOAD	EU-LOAD-1	Condensate Truck Loading	1978

EUG D. Glycol Dehydration Unit and Reboiler

EU	Point	Description	MMBTUH	Date Installed	Modified
EU-TEGV	P-TEGV	Dehydrator		1978	2018
EU-TEGH	P-TEGH	Reboiler	0.5	1978	-

SECTION VI. EMISSIONS

Unless otherwise stated emissions are based on 8,760 hours per year of operation with combustion sources firing field-grade natural gas.

ENGINES

Emissions estimates for the compressor engines are based on continuous operation and manufacturer's data shown in the following table.

Engine Emission Factors

Emission Unit	Equipment	NOx	CO	VOC
Emission Unit	Equipment	g/hp-hr	g/hp-hr	g/hp-hr ⁽¹⁾
EU-CM-2833	588-hp Waukesha L7042 GU	18.00	4.00	1.00
EU-CM-2818	1,232-hp Waukesha L7042 GSI w/ NSCR	2.00	3.00	0.44

⁽¹⁾ Includes formaldehyde.

Engine Emissions

Emission	NOx		CO		VOC ⁽¹⁾	
Unit	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-CM-2833	23.33	102.20	5.19	22.71	1.30	5.68
EU-CM-2818	5.43	23.79	8.15	35.69	1.20	5.23

⁽¹⁾ Includes formaldehyde.

Estimates of formaldehyde emissions are based on factors in AP-42 (7/00), Section 3.2. The table below lists estimated formaldehyde emissions for the compressor engines.

Engine HAP Emissions

Emission	Description	Heat Input,	Emission Factor,	Formal	dehyde
Unit	Description	MMBTUH	lb/MMBTU	lb/hr	TPY
EU-CM-2833	Waukesha L7042 GU	5.36	0.0205	0.11	0.48
EU-CM-2818	Waukesha L7042 GSI w/ NSCR	8.46	0.0205	0.17	0.76

GLYCOL DEHYDRATION UNIT

Glycol dehydrator vent emissions are based on the GRI-GLYCalc version 4.0 program using a gas throughput of 13.0 MMSCFD and a glycol circulation rate of 1.5 GPM. The still vent is controlled by a condenser with 85% efficiency. While the uncondensed vapors are either routed to the reboiler for fuel or to the atmosphere, the calculations presented here assume the uncondensed vapors are released to the atmosphere 100% of the time. The flash tank is routed to the facility inlet resulting in a 100% control efficiency. A 100% safety factor is included in the calculations. Dehydration units using glycol desiccants emit benzene, toluene, ethyl benzene, xylenes, and n-hexane from the glycol reboiler vent stack. These components are regulated as HAPs. The applicant has analyzed (9/22/05 model based on average gas analysis from 8/9/00, 5/21/04 and 6/10/05) the inlet gas for HAP emissions using the GRI-GLYCalcTM version 4.0 software.

Glycol Dehydrator Emissions

Glycoi Denyurator Emissions				
Parameter	Data			
Type of Glycol	Triethylene			
Gas Flow Rate, MMSCFD	13.0			
Glycol Pump Type	Gas Injection			
Lean Glycol Pump Design Capacity, GPM	1.5			
Lean Glycol Circulation Rate Input, GPM	1.5			
Regenerator V	ent			
Control Type or Recycle	Condenser			
Condenser Outlet Temp. °F	120			
Overall Control Efficiency, %	85			
VOC Emissions, TPY	5.34			
Flash Tank				
Control Type or Recycle	Inlet			
Overall Control Efficiency, %	100			
VOC Emissions, TPY	-			
Total Emissions,	ГРY ⁽¹⁾			
VOC	10.68			
Benzene	0.76			
Toluene	1.08			
Ethyl Benzene	0.44			
Xylene	2.39			
n-Hexane	0.27			
Total HAPs	4.89			

⁽¹⁾ Includes 100% safety factor (1+100%).

Emissions for the dehydrator reboiler are based on AP-42 (7/98), Section 1.4 and the rating listed below.

Dehydration Reboiler Emission Factors

Emission Unit	NOx	CO	VOC
	(lb/MMBTU)	(lb/MMBTU)	(lb/MMBTU)
EU-TEGH – 0.50-MMBTUH	0.098	0.082	0.005

Dehydration Reboiler Emissions

Emission	NO	Ox	CO		VOC	
Unit	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
EU-TEGH	0.05	0.21	0.04	0.18	< 0.01	0.01

TANKS

Estimated emissions of working and breathing losses for the condensate tanks are estimated using AP-42 (6/20), Section 7.1 and assuming the tank contents to be Gasoline (RVP 10). VOC emissions are only calculated for tank EU-TK-2 and EU-TK-10 since emissions are negligible from the other tanks. Flash emissions were calculated using the Vasquez-Beggs Solution Gas/Oil Ratio Correlation Method and the listed throughput. Flash emissions at the storage tanks result as liquids under pressure enter the tanks at atmospheric pressure.

Vasquez-Beggs Inputs

Parameter	Condensate
API Gravity	70
Separator Pressure (psig)	35
Separator Temperature (°F)	60
Stock Tank Barrels of Oil Per Day (BOPD)	30
Gas Molecular Weight (lb/lb-mol)	66
Separator Gas Specific Gravity	0.9
Fraction VOC in Tank Gas	0.8
Atmospheric Pressure (psia)	14.7

TK-2 and TK-10 Emissions

Parameter	EU-TK-2	EU-TK-10
Throughput, gal/yr	229,950	229,950
Flash Calculation Method/Tool	Vasquez-Beggs	Vasquez-Beggs
Working/Breathing Method/Tool	AP-42 (6/20), Section 7.1	AP-42 (6/20), Section 7.1
Control Type	None	None
VOC Emissions, TPY	15.68	15.91

LOADING

Emissions from loading condensate into tank trucks were estimated using AP-42 (6/08), Section 5.2, Equation 1, and the parameters listed in the table on the following page. The molecular weight (MW) listed is based on AP-42 (6/20), Section 7.1 calculations.

Loading Parameters and Emissions

Parameter	EU-LOAD
Liquids Loaded	Condensate
Throughput, gal/yr	459,900
Saturation Factor	0.6
Temp., °F	63.27
TVP, psia	5.77
MW, lb/lbmol	66
VOC, wt.%	100
Emission Factor, lb/10 ³ gal	5.437
VOC Emissions, TPY	1.25

FUGITIVES

Emissions from fugitive equipment leaks (EU-FUG) are based on EPA's "Protocol for Equipment Leak Emission Estimates" (11/95, EPA-453/R-95-017), an estimated number of components, and the VOC (C_{3+}) content of the materials handled.

Emission	Engitive Emission	# of	VOC	Emission Factor	VOC Emissions	
Unit	Fugitive Emission	Units	Content %	VOC (lb/hr-source)	lb/hr	TPY
	Valves – Gas	100	18.88	0.00992	0.19	0.82
	Flanges – Gas	110	18.88	0.00086	0.02	0.08
	Compressor Seals – Gas	40	18.88	0.0194	0.15	0.64
	Relief Valves – Gas	25	18.88	0.0194	0.09	0.40
EU-FUG	Valves – Liquid	10	100	0.0055	0.06	0.24
	Flanges – Liquid	11	100	0.0002	0.003	0.01
	Compressor Seals – Liquid	6	100	0.0287	0.17	0.75
	Relief Valves – Liquid	5	100	0.0165	0.08	0.36
	Total				0.76	3.30

FACILITY-WIDE EMISSIONS

E animum and	Emission	N	Ox	СО		VOC	
Equipment	Unit	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
588-hp Waukesha L7042 GU Engine	EU-CM-2833	23.33	102.20	5.19	22.71	1.30	5.68
1,232-hp Waukesha L7042 GSI w/ NSCR	EU-CM-2818	5.43	23.79	8.15	35.69	1.20	5.23
13.0-MMSCFD Dehydrator	EU-TEGV			-		2.44	10.68
0.5-MMBTUH Reboiler	EU-TEGH	0.05	0.21	0.04	0.18	< 0.01	0.01
210-bbl Condensate Storage Tank	EU-TK-2			-			15.68
300-bbl Condensate Storage Tank	EU-TK-10			-			15.91
Truck Loading	EU-LOAD			-			1.25
Fugitive VOC	EU-FUG			-		0.76	3.30
Total Emissions		28.81	126.20	13.38	58.58	5.69	57.75
Previous Emissions (Permit No. 2015-1865-TVR3 (M-1)		28.81	126.20	13.38	58.58	18.76	48.71
Change in Emissions						-13.07	9.04

The total HAP emissions from the facility are below the major source threshold of 10/25 TPY of single/combination of all HAPs. Therefore, the facility is an area source for HAPs.

SECTION VII. INSIGNIFICANT ACTIVITIES

The insignificant activities identified and justified in the application and listed in OAC 252:100-8, Appendix I, are listed below. Record keeping for activities indicated with "*" is required in the Specific Conditions. Any activities to which a state or federal applicable requirement applies is not insignificant even if included in this list.

- 1. *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. There is an 8,820-gallon condensate tank and a 12,600-gallon condensate tank.
- 2. *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. There is a 518-gallon antifreeze tank, a 300-gallon antifreeze tank, a 4,536-gallon lube oil tank, and a 565-gallon tri-ethylene glycol tank.
- 3. *Activities having the potential to emit no more than 5.0 TPY (actual) of any criteria pollutant. There is a 565-gallon methanol tank, a 529-gallon glycol dehydration processed water tank, and a 2,268-gal water tank.

SECTION VIII. 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 as required.

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 mean individual emission units that either are on the list in Appendix I (OAC 252:100) or whose actual calendar year emissions do not exceed the following limits:

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

Emission limitations and operational requirements necessary to assure compliance with all applicable requirements for all sources are taken from the operating permit application and previous permit.

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

[Applicable]

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

OAC 252:100-13 (Open Burning)

[Applicable]

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

OAC 252:100-19 (Particulate Matter)

[Applicable]

Section 19-4 regulates emissions of PM from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. Fuel-burning equipment is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy. Thus the engines and heater are subject to the requirements of this subchapter. OAC 252:100, Appendix C specifies a PM emission limitation of 0.60 lbs/MMBTU for all equipment at this facility with a heat input rating of 10 MMBTUH or less. OAC 252:100, Appendix C specifies a PM emission limitation for all equipment at this facility with a heat input rating of greater than 10 MMBTUH but less than 1,000 MMBTUH based on the following calculation: E = 1.0428080X^{-0.238561}, where E is the allowable emission rate and X is the maximum heat input. Table 3.2-3 of AP-42 (7/00) lists the total PM emissions from 4-stroke, rich-burn, natural gas-fired engines to be 0.02 lbs/MMBTU. Table 1.4-2 of AP-42 (7/98) lists the total PM emissions for natural gas-fired heaters to be 7.6 lb/MMft³ or about 0.0075 lb/MMBTU. This permit requires the use of natural gas for all fuel-burning equipment to ensure compliance with Subchapter 19.

Emission Unit	Equipment	Maximum Heat Input	Emissions (lbs/MMBTU)		
		(MMBTUH)	Appendix C	Potential	
EU-CM-2833	Waukesha L7042 GU	5.36	0.60	0.02	
EU-CM-2818	Waukesha L7042 GSI w/ NSCR	8.46	0.60	0.02	
EU-TEGH	0.50-MMBTUH Glycol Reboiler	0.50	0.60	< 0.01	

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

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

[Applicable]

No discharge of greater than 20% opacity is allowed except for short-term occurrences 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. When burning natural gas, there is very little possibility of exceeding the opacity 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 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. Under normal operating conditions, this facility will not cause a problem in this area, 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 concentration of hydrogen sulfide (H_2S) emissions from any facility to 0.2 ppmv (24-hour average) at standard conditions which is equivalent to 283 $\mu g/m^3$. Based on modeling conducted for the general permit for oil and gas facilities, the ambient impacts of H_2S from oil and gas facilities combusting natural gas with a maximum H_2S content of 343 ppmv, processing sweet natural gas through a glycol dehydration unit, and storing condensate or sweet crude oil will be in compliance with the H_2S ambient air concentration limit.

<u>Part 5</u> limits sulfur dioxide emissions from new petroleum or natural gas process 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. Gas produced from oil and gas wells having 343 ppmv or less total sulfur will ensure compliance with Subchapter 31. The permit requires the use of pipeline-grade natural gas or field gas with a maximum sulfur content of 343 ppmv for all fuel-burning equipment to ensure compliance with Subchapter 31.

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 0.2 lb of NOx per MMBTU. There are no equipment items that exceed the 50 MMBTUH threshold.

OAC 252:100-35 (Carbon Monoxide)

[Not Applicable]

This facility has none of the affected sources: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit or petroleum catalytic reforming unit.

OAC 252:100-37 (Volatile Organic Compounds)

[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 the condensate and methanol storage tanks. The vapor pressure of glycol, processed water from the dehydration unit, and lube oil are less than 1.5 psia; therefore, Part 3 does not apply to those tanks. The condensate and methanol tanks have submerged fill pipes; therefore, they comply with Part 3. Part 3 requires VOC loading facilities with a throughput equal to or less than 40,000 gallons per day to be equipped with a system for submerged filling of tank trucks or trailers if the capacity of the vehicle is greater than 200 gallons. This facility does not have the physical equipment (loading arm and pump) to conduct this type of loading and is not subject to this requirement.

<u>Part 5</u> limits the VOC content of coating used in coating lines or operations. Any painting operation will involve maintenance coatings of buildings and equipment and emit less than 100 pounds per day of VOCs and so is exempt. 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> requires all effluent water separator openings which receive water containing more than 200 gallons per day of any VOC, to be sealed or the separator to be equipped with an external floating roof or a fixed roof with an internal floating roof or a vapor recovery system. No effluent water separators are located at this facility.

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

[Applicable]

This subchapter regulates TAC that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a modification is approved by the Director. Since no AOC has been designated anywhere in the state, 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 Quality Rules are not applicable to this facility:

OAC 252:100-11	Alternative Emissions Reduction	Not requested
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	Grain Elevators	Not in source category
OAC 252:100-33	Nitrogen Dioxides	Not in source category
OAC 252:100-35	Carbon Monoxide	Not type of emission unit
OAC 252:100-39	Nonattainment Areas	Not in area category

SECTION IX. FEDERAL REGULATIONS

PSD, 40 CFR Part 52

[Not Applicable]

Final total emissions are less than the threshold of 250 TPY of any single regulated pollutant and the facility is not one of the 26 specific industries with a threshold of 100 TPY, therefore, the facility is not subject.

NSPS, 40 CFR Part 60

[Subpart OOOOa Applicable]

<u>Subparts K & Ka, Storage Vessels for Petroleum Liquids for which construction, reconstruction, or modification commenced after June 11, 1973, and prior to July 23, 1984. These subparts affect petroleum liquid storage vessels which have a capacity greater than 40,000 gallons. None of the tanks at this facility are greater than 40,000 gallons.</u>

<u>Subpart Kb</u>, Volatile Organic Liquid (VOL) Storage Vessels for which construction, reconstruction, or modification Commenced after July 23, 1984. This subpart affects VOL storage vessels with a capacity greater than or equal to 19,813 gallons. None of the tanks at this facility are greater than 19,813 gallons.

<u>Subpart JJJJ</u>, Stationary Spark Ignition Internal Combustion Engines (SI ICE), promulgates emission standards for all new SI engines ordered after June 12, 2006, and all SI engines modified or reconstructed after June 12, 2006, regardless of size. The specific emission standards (either in g/hp-hr or as a concentration limit) vary based on engine class, engine power rating, lean-burn or rich-burn, fuel type, duty (emergency or non-emergency), and numerous manufacture dates. 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. Emergency engines will be required to be equipped with a non-resettable hour meter and are limited to 100 hours per year of operation excluding use in an emergency (the length of operation and the reason the engine was in operation must be recorded). The two engines were manufactured before July 1, 2007, and are not subject to this subpart.

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

- 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 gas-driven 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 located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment, that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water and has the potential for VOC emissions equal to or greater than 6 TPY.
- 6) The group of all equipment, except compressors, within a process unit located at an onshore natural gas processing plant is an affected facility.
- 7) Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.

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. Compressors CM-2833 and CM-2818 were manufactured prior to August 23, 2011, and have not been modified or reconstructed. 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, and on before September 18, 2015, 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 and have not been modified or reconstructed. Therefore, they 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 have not been modified or reconstructed. Therefore, they are not subject to this subpart. Furthermore, this facility is not a gas processing plant.

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 no amine unit at the facility.

<u>Subpart OOOOa</u>, Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After September 18, 2015. This subpart affects the following onshore affected facilities:

- 1) Each well affected facility, which is a single well that conducts a well completion operation following hydraulic fracturing or refracturing.
- 2) Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals. A centrifugal compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.
- 3) Each reciprocating compressor affected facility, which is a single reciprocating compressor. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.
- 4) Each pneumatic controller affected facility:
 - a. Each pneumatic controller affected facility not located at a natural gas processing plant, which is a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 SCFH.
 - b. Each pneumatic controller affected facility located at a natural gas processing plant, which is a single continuous bleed natural gas-driven pneumatic controller.
- 5) Each storage vessel affected facility, which is a single storage vessel with the potential for VOC emissions equal to or greater than 6 TPY as determined according to §60.5365a(e).
- 6) The group of all equipment within a process unit located at an onshore natural gas processing plant is an affected facility. Equipment within a process unit of an affected facility located at onshore natural gas processing plants are exempt from this subpart if they are subject to and controlled according to Subparts VVa, GGG, or GGGa.
- 7) Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.
- 8) Each pneumatic pump affected facility:
 - a. For natural gas processing plants, each pneumatic pump affected facility, which is a single natural gas-driven diaphragm pump.
 - b. For well sites, each pneumatic pump affected facility, which is a single natural gasdriven diaphragm pump.
- 9) The collection of fugitive emissions components at a well site, as defined in §60.5430a, is an affected facility, except as provided in § 60.5365a(i)(2).
- 10) The collection of fugitive emissions components at a compressor station, as defined in § 60.5430a, is an affected facility.

There are no wells, centrifugal compressors, or sweetening units located at this facility. The reciprocating compressors, pneumatic controllers, and storage vessels at this facility commenced construction prior to September 18, 2015, and have not been modified or reconstructed. Due to the horsepower capacity previously added under Permit No. 2015-1865-C (M-1), the facility became subject to the fugitive monitoring requirements of NSPS Subpart OOOOa. All applicable requirements have been incorporated into the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61

[Not Applicable]

There are no emissions of any of the regulated pollutants: arsenic, asbestos, beryllium, benzene, coke oven emissions, mercury, radionuclides or vinyl chloride except for trace amounts of

benzene. <u>Subpart J</u>, Equipment Leaks of Benzene only affects process streams which contain more than 10% benzene by weight. All process streams at this facility are below this threshold.

NESHAP, 40 CFR Part 63

[Subparts HH and ZZZZ Applicable]

Subpart HH, Oil and Natural Gas Production Facilities. This rule affects each TEG dehydration unit located at an area source oil and natural gas facility that processes, upgrades, or stores hydrocarbon liquids to the point of custody transfer and natural gas from the well up to and including the natural gas processing plant. Sources with either an annual average natural gas flowrate less than 3 MMSCFD or benzene emissions less than 1.0 TPY are exempt from control requirements. This facility has an annual average natural gas flowrate of 13.0 MMSCFD and emits 0.76 TPY of benzene. The facility is therefore not subject to the control requirements of Subpart HH. However, the facility must maintain records of the de minimis determination as required in § 63.774(d)(1). The applicable recordkeeping requirements have been incorporated into the permit. Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE). Owners and operators of new or reconstructed engines at area sources and of new or reconstructed engines with a site rating equal to or less than 500 HP located at a major source (except new or reconstructed 4-stroke, leanburn (4SLB) engines with a site rating greater than or equal to 250 HP and less than or equal to 500 HP located at a major source) 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). Owners and operators of new or reconstructed 4SLB engines with a site rating greater than or equal to 250 HP and less than or equal to 500 HP located at a major source are subject to the same MACT standards previously established for 4SLB engines above 500 HP at a major source, and must also meet the requirements of 40 CFR Part 60 Subpart JJJJ, except for the emissions standards for CO. Based on emissions calculations, this facility is an area source of HAP. CM-2833 and CM-2818 are subject to the requirements of Subpart ZZZZ.

CM-2833 and CM-2818 are existing units. Since the facility is considered remote as defined in §63.6675, the engines are subject to maintenance practices as listed in the following table.

Engine Category	Requirements From Table 2d to Subpart ZZZZ of Part 63 ⁽¹⁾
Non-emergency, non-black start 4SLB & 4SRB remote stationary RICE >500 HP	a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first; (2)
	b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary; and
	c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.

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

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

1. Stationary RICE located on a pipeline segment that meets both of the following criteria:

- (a) 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.
- (b) 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 stated above, this facility and the engines installed at the facility are considered remote. All applicable requirements have been incorporated into the permit.

Compliance Assurance Monitoring (CAM), 40 CFR Part 64 [Applicable] Compliance Assurance Monitoring, 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 major source levels.
 - (1) Engine CM-2818 has potential emissions greater than 100 TPY and a control device is utilized to control emissions to achieve compliance with any applicable emission limits or standards. Therefore, CM-2818 is subject to CAM.
 - (2) Engine CM-2833 has potential emissions greater than 100 TPY; however, it is not subject to an emission limit due to its "exempt" status (i.e., has no emission limits). Therefore, CM-2833 is not subject to CAM.
 - (3) Dehydration unit TEGV utilizes condenser and combustion device to achieve compliance; however, it does not have the potential to emit over 100 TPY of VOC without control. Therefore, TEGV is not subject to CAM.

Specifications for the new CAM-affected unit (CM-2818) are incorporated in the permit.

MONITORING APPROACH JUSTIFICATION

BACKGROUND

The monitoring approach outlined here applies to the Non-Selective Catalytic Reduction (NSCR) on compressor engine CM-2818 at the facility. The NSCR lowers NOx, as well as CO, H₂CO, and hydrocarbon emissions. The catalysts are passive units and have no mechanical components.

RATIONALE FOR SELECTION OF PERFORMANCE INDICATORS

The oxygen content of the engine exhaust gas was selected as a performance indicator because the gas must have less than 0.5 percent oxygen as it enters the catalyst. Oxygen can interfere with proper reactions and oxygen content indicates if the engine is running rich as is required. Oxygen content is typically measured using an oxygen sensor that creates an output voltage inversely proportionally to the oxygen content.

The pressure drop across the catalyst is measured monthly. A significant change in pressure drop from the benchmark can indicate that the catalyst is becoming fouled, slowing gas flow through the unit, and lowering the effectiveness of the unit.

Temperature into or out of the unit is measured because temperature excursions can indicate problems with engine operation and can prevent the chemical reduction from taking place in the catalyst bed. An exhaust gas temperature that is too low reduces the activity of the intended chemical/catalyst reaction. A temperature that is too high can indicate engine problems and can damage the catalyst unit.

Implementation of an engine and catalyst inspection and preventive maintenance (IPM) program provides assurance that the engine and catalyst are in good repair and are being operated as anticipated. Once per week, proper operation of the engine is verified to ensure that the catalysts aren't being fouled or damaged. Proper operation of the engine also facilitates catalyst reactions. Other items on the daily IPM checklist include inspecting the air-to-fuel ratio controller, visual inspection of probes to ensure there is no clogging, and inspection of temperature gauges and chart recording devices. The inspection and preventive maintenance plan contains a schedule for replacing oxygen sensors quarterly.

RATIONALE FOR SELECTION OF INDICATOR RANGES

The output voltage range (typically 0.1 to 0.9 volts above 650°F) is site-specific and must be set by using an exhaust gas analyzer to determine the set-point voltage that results in the best emission performance. An alarm will be triggered if the position of an AFRC stepper valve is at the minimum travel limit (indicating the engine is too rich and the controller cannot close the valve any further) or maximum travel limit (indicating that the engine is too lean and the controller cannot open the valve any further to enrich the mixture). The field office will receive notification when the alarm sounds for 30 minutes. Such excursions should trigger corrective action, logging, and reporting in the semiannual reports.

Compliance Assurance Monitoring Requirements and Specifications for Engine CM-2818.

Indicator No. 1 Indicator No. 2 Indicator No. 3 Indicator No. 3						
I. Indicator	O ₂ from engine	Pressure drop across	Temperature of	Temperature of		
17 1110104101		the catalyst.	exhaust gas into	exhaust gas out of		
		and carries of	catalyst.	catalyst.		
Measurement	O ₂ 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 an		
	in-line O ₂ sensor.	pressure gauge or a	in-line thermocouple.	in line thermocouple.		
		water manometer.				
II. Indicator Range	The indicator is	The indicator range is	The indicator range is	The indicator range is		
	alarm-based. The	a pressure drop	above 750°F, but	above 800°F, but		
	indicator range is no	deviation of less than	lower than 1,250°F.	lower than 1,300°F.		
	alarmed event lasting	2 in. H ₂ O from the	Excursions trigger	Excursions trigger		
	30 minutes or longer.	benchmark.	corrective action,	corrective action,		
	Excursions trigger	Excursions trigger	logging and reporting	logging and reporting		
	corrective action,	corrective action,	in semiannual report.	in semiannual report.		
	logging and reporting	logging and reporting				
III. Performance	in semiannual report.	in semiannual report				
Criteria						
A. Data	Observations are	Pressure drop across	Temperature is	Temperature is		
Representa-	performed at the	the catalyst is	measured at the inlet	measured at the outlet		
iveness	engine exhaust while	measured at the	to the catalyst by a	of the catalyst by a		
	the engine is	catalyst inlet and	thermocouple. The	thermocouple. The		
	operating.	exhaust. The	minimum accuracy is	minimum accuracy is		
		minimum accuracy of	±5°F.	±5°F.		
		the device is ± 0.25 in.				
D OA/OC	0	H ₂ O.	Th	Th1.		
B. QA/QC – Practices and	O ₂ sensor replaced quarterly.	Pressure gauge calibrated quarterly.	Thermocouple visually checked	Thermocouple visually checked		
Criteria	quarterry.	Pressure taps checked	quarterly and tested	quarterly and tested		
Cincia		monthly for plugging.	annually.	annually.		
C. Monitoring	O ₂ percent monitored	Pressure drop is	Temperature is	Temperature is		
Frequency	continuously.	measured monthly.	measured	measured		
1		,	continuously.	continuously.		
D. Data	Records are	Records are	A strip chart records	A strip chart records		
Collection	maintained to	maintained to	the temperature	the temperature		
Procedures	document alarmed	document monthly	continuously or an	continuously or an		
	events and any	readings and any	operator or computer	operator or computer		
	required maintenance.	required maintenance.	may record at least	may record at least		
	27	N Y	once per day.	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.		
	1		maximums.	maximums.		

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable] This facility will not process or store more than the threshold quantity of any regulated substance (Section 112r of the Clean Air Act 1990 Amendments). More information on this federal program is available on the web page: www.epa.gov/rmp.

Stratospheric Ozone Protection, 40 CFR Part 82

[Not 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. This facility does not utilize any Class I & II substances.

<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 X. COMPLIANCE

The Specific Conditions of this permit contain various testing, monitoring, recordkeeping, and reporting requirements in order to document on-going compliance with emission limits. The specific method used to document compliance was based on the type of emission unit, the type of process equipment, the specific pollutants emitted, and the amount of permitted emissions taking into account other regulatory requirements that an emission unit may be subject to.

In addition to the permitting requirements, the following periodic inspections were conducted since issuance of the last Title V renewal permit.

Inspection Type	Date	Summary/Results
Full Inspection	11/10/2016	In compliance
Full Inspection	2/8/2019	In compliance

One area of concern was identified during the Full Compliance Inspection (FCE) conducted on February 8, 2019. The area of concern states that no blowdown emissions have been reported in the emissions inventories since the previous inspection. If future blowdown emissions are above the 0.1 TPY reporting threshold, they should be reported in the emissions inventories. There have been no other enforcement actions since issuance of the last Title V renewal permit.

TESTING

The initial PEA testing for CM-2818 is shown in the following table. The results show compliance with the applicable emissions limits.

			Permit	Limits	Test Results	
EU	Source	Test Date	NOx	CO	NOx	CO
			lb/hr	lb/hr	lb/hr	lb/hr
EU-CM-2818	Waukesha L7042 GSI w/NSCR	12/07/2020	5.43	8.15	1.92	2.74

SECTION XI. TIER CLASSIFICATION, PUBLIC AND EPA REVIEW

This application has been determined to be **Tier II** based on the request for renewal of a Part 70 operating permit.

The applicant published the "Notice of Filing a Tier II Application" in The Kingfisher Times and Free Press, a weekly publication in Kingfisher County on February 3, 2021. The notice states that the application is available for public review at the Kingfisher Memorial Library, or the DEQ office in Oklahoma City.

The applicant will also publish a "Notice of Tier II Draft Permit" in a local newspaper in Kingfisher County where the facility is located. The notices will state that the draft permit will be available for a 30-day public review at the facility or the DEQ office in Oklahoma City. The notices will also state that the draft permit will be available for public review in Kingfisher County, Oklahoma. Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web page: www.deq.ok.gov. The proposed permit will be sent to EPA for a 45-day concurrent review by EPA Region 6.

This facility is not located within 50 miles of the border of Oklahoma so no notice to other states is required.

If the Administrator does not object in writing during the 45-day EPA review period, any person that meets the requirements of this subsection may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection. Any such petition shall be based only on objections to the permit that the petitioner raised with reasonable specificity during the public comment period provided for in 27A O.S. § 2-14-302.A.2., unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period. If the Administrator objects to the permit as a result of a petition filed under this subsection, the DEQ shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection. If the DEQ has issued a permit prior to receipt of an EPA objection under this subsection, the DEQ will modify, terminate, or revoke such permit, and shall do so

consistent with the procedures in 40 CFR §§ 70.7(g)(4) or (5)(i) and (ii) except in unusual circumstances. If the DEQ revokes the permit, it may thereafter issue only a revised permit that satisfies EPA's objection. In any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

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 which is given to accomplish the permitted purpose.

FEE PAID

Part 70 operating permit renewal fee of \$7,500 has been received.

SECTION XII. SUMMARY

The facility was constructed as described in the permit application. Ambient air quality standards are not threatened at the site. There are no active Air Quality compliance or enforcement issues that would prevent issuance of the permit. Issuance of the operating permit is recommended, contingent on public and EPA reviews.

DRAFT/PROPOSED

PERMIT TO OPERATE AIR POLLUTION CONTROL FACILITY SPECIFIC CONDITIONS

Mustang Gas Products, LLC Kingfisher East Compressor Station

Permit Number 2020-0501-TVR4

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on November 24, 2020. The Evaluation Memorandum dated June 3, 2021, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein.

1. Points of emissions and emissions limitations for each point:

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

EUG A: CM-2833 and CM-2818 are existing units located at an area source of hazardous air pollutant (HAP). Therefore, these engines are subject to the requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZ. EU-CM-2833 has "exempted" status and is limited to the existing equipment as it is.

Exempted Engine

		- I			
EU	Point	Make/Model	HP	Serial #	Manufacture Date
EU-CM-2833	P-CM-2833	Waukesha L7042 GU	588	191567	1978

Engine Emission Limits

Engine	Emission	N	NOx		CO		OC
Engine	Unit lb/hr	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1,232-hp Waukesha L7042 GSI w/ CC	EU-CM-2818	5.43	23.79	8.15	35.69	1.20	5.23

EUG B: VOC emissions from storage tanks are estimated based on existing equipment items but do not have a specific limitation. These tanks are considered as insignificant sources.

EU	Point	Capacity (gallon)	Material Stored
	P-TK-1	529	Processed Water
	P-TK-2	8,820	Condensate
	P-TK-10	12,600	Condensate
EU-TK	P-TK-3	4536	Lube oil
	P-TK-4	565	Methanol
	P-TK-5	518	Antifreeze
	P-TK-5(1)	300	Antifreeze
	P-TK-6	565	Triethylene glycol
	P-TK-9	2,268	Water Tank

EUG C: Fugitive VOC emissions are estimated based on existing equipment items but do not have a specific limitation. These are considered as insignificant sources.

EU	Emission Units	Number of Unit
	Valves	110
EU-FUG	Compressor Seals	116
	Pressure relief valves	30
	Flanges	121

EUG D: Emission unit EU-TEGV is an existing TEG glycol dehydrator and was modified in 2018. Emission limits for EU-TEGV are based on a natural gas throughput of 13 MMSCFD, a recent gas analysis, a lean glycol recirculation rate of 1.50 GPM, condensation of the still vent off-gases, and recompression of the flash tank off-gases. The glycol dehydration unit shall be operated and maintained as follows:

EU	Point	Description	Size/Rating	Date Installed	Modified
EU-TEGV	P-TEGV	Dehydrator	13.0-MMSCFD	1978	2018
EU-TEGH	P-TEGH	Reboiler	0.5-MMBTUH	1978	-

Dehydration Unit Emission Limits

EU	VOC		
	lb/hr	TPY	
EU-TEGV	2.44	10.68	

- a. The natural gas throughput of the glycol dehydration unit shall not exceed 13 MMCFD (monthly average).
- b. The lean glycol recirculation rate of the glycol dehydration unit shall not exceed 1.50 gallons per minute.
- c. The glycol dehydration unit shall be equipped with a flash tank on the rich glycol stream. All emissions from the glycol dehydration unit's flash tank shall be routed to the facility inlet for compression resulting in a 100% control efficiency.
- d. The permittee shall continue to operate and maintain a condenser on the glycol dehydration unit's still vent when the dehydration unit is in operation. All emissions from the overhead still vent shall be routed to the condenser with at least an 85% control efficiency.
- e. The permittee shall comply with all applicable requirements of the NESHAP for Oil and Natural Gas Production, Subpart HH, for each affected dehydration unit including but not limited to the following: [40 CFR §63.760 through §63.775]
 - 1. An owner or operator of a glycol dehydration unit that meets the exemption criteria in § 63.764(e)(1)(i) or § 63.764(e)(1)(ii) shall maintain the records specified in §§ 63.774(d)(1)(i) or (d)(1)(ii), as appropriate, for that glycol dehydration unit.
- 2. The fuel-burning equipment shall be fired with pipeline quality natural gas or other gaseous fuel with a sulfur content below 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 per calendar year. [OAC 252:100-31]

- 3. 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)]
- 4. Each engine/turbine at the facility shall have a permanent identification plate attached, which shows the make, model number, and serial number. [OAC 252:100-43]
- 5. CM-2818 shall be operated with exhaust gas passing through a properly functioning catalytic converter.
- 6. At least once per calendar quarter, the permittee shall conduct tests of NOx and CO emissions for CM-2818 and from each replacement engine/turbine when operating under representative conditions for that period. Testing is required for any engine/turbine 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/turbine 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 is authorized to replace any internal combustion engine or turbine with emissions limitations specified in this permit with an engine or turbine that meets the following requirements: [OAC 252:100-8-6(f)(2)]
 - a. The replacement engine or turbine shall comply with the same emissions limits as the engine or turbine that it replaced. This applies to lb/hr and TPY limits specified in this permit.
 - b. The authorization of replacement of an engine or turbine 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 or turbine. Said notice shall identify the old engine/turbine and shall include the new engine/turbine 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)/turbine(s) shall be conducted to confirm continued compliance with NO_X 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/turbine. The test report shall include the engine/turbine fuel usage, stack flow (ACFM), stack temperature (°F), and pollutant emission rates (g/hp-hr, lb/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.
- h. Turbines whose installation and operation are authorized under this Specific Condition which are subject to 40 CFR Part 60, Subpart KKKK shall comply with all applicable requirements.
- 8. The following records shall be maintained on site to verify insignificant activities.

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

- a. Emissions from storage tanks constructed with a capacity less than 39,894 gallons, which store VOCs with a vapor pressure less than 1.5 psia at maximum storage temperature. Tank contents and annual throughput. There is a 518-gallon antifreeze tank, a 300-gallon antifreeze tank, a 4,536-gallon lube oil tank, and a 565-gallon tri-ethylene glycol tank.
- b. Emissions from crude oil and condensate storage tanks with a capacity of less than or equal to 420,000 gallons that store crude oil or condensate prior to custody transfer. There is an 8,820-gallon condensate tank and a 12,600-gallon condensate tank.
- c. Activities having the potential to emit no more than 5 TPY (actual) of any criteria pollutant. List the activity with estimated actual annual emissions. There is a 565-gallon methanol tank, a 529-gallon glycol dehydration processed water tank, and a 2,268-gal water tank.
- 9. The permittee shall keep operation and maintenance (O&M) records for those engines/turbines which do not conduct quarterly testing. Such records shall at a minimum include the dates of operation, and maintenance, type of work performed, and the increase, if any, in emissions as a result.

 [OAC 252:100-8-6 (a)(3)(A)]
- 10. All condensate storage tanks (EU-TK-2 and EU-TK-10) and the methanol storage tank (EU-TK-4) shall be equipped with a permanent submerged fill pipe or an organic vapor recovery system.

 [OAC 252:100-37]
- 11. The permittee shall comply with all applicable requirements of the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), Subpart ZZZZ, for each affected engine, including but not limited to: [40 CFR §63.6585 through §63.6675]

- 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. §63.6600 What emission limitations and operating limitations must I meet?
- 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?
- 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, 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. §63.6670 Who implements and enforces this subpart?
- t. §63.6675 What definitions apply to this subpart?
- 12. The permittee shall comply with all applicable requirements in 40 CFR Part 60, Subpart OOOOa, Crude Oil and Natural Gas Facilities. This subpart affects the following sources that commence construction, reconstruction, or modification after September 18, 2015, including, but not limited to, the following. [40 CFR §60.5360a through §60.5433a]
 - a. § 60.5360a What is the purpose of this subpart?
 - b. § 60.5365a Am I subject to this subpart?
 - c. § 60.5370a When must I comply with this subpart?
 - d. § 60.5375a What GHG and VOC standards apply to well affected facilities?
 - e. § 60.5380a What GHG and VOC standards apply to centrifugal compressor affected facilities?
 - f. § 60.5385a What GHG and VOC standards apply to reciprocating compressor affected facilities?
 - g. § 60.5390a What GHG and VOC standards apply to pneumatic controller affected facilities?
 - h. § 60.5393a What GHG and VOC standards apply to pneumatic pump affected facilities?
 - i. § 60.5395a What VOC standards apply to storage vessel affected facilities?
 - j. § 60.5397a What fugitive emissions GHG and VOC standards apply to the affected facility which is the collection of fugitive emissions components at a well site and the affected facility which is the collection of fugitive emissions components at a compressor station?

- k. § 60.5398a What are the alternative means of emission limitations for GHG and VOC from well completions, reciprocating compressors, the collection of fugitive emissions components at a well site and the collection of fugitive emissions components at a compressor station?
- 1. § 60.5400a What equipment leak GHG and VOC standards apply to affected facilities at an onshore natural gas processing plant?
- m. § 60.5401a What are the exceptions to the equipment leak GHG and VOC standards for affected facilities at onshore natural gas processing plants?
- n. § 60.5402a What are the alternative means of emission limitations for GHG and VOC equipment leaks from onshore natural gas processing plants?
- o. § 60.5405a What standards apply to sweetening unit affected facilities at onshore natural gas processing plants?
- p. § 60.5406a What test methods and procedures must I use for my sweetening unit affected facilities at onshore natural gas processing plants?
- q. § 60.5407a What are the requirements for monitoring of emissions and operations from my sweetening unit affected facilities at onshore natural gas processing plants?
- r. § 60.5408a What is an optional procedure for measuring hydrogen sulfide in acid gas—Tutwiler Procedure?
- s. § 60.5410a How do I demonstrate initial compliance with the standards for my well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump, storage vessel, collection of fugitive emissions components at a well site, and collection of fugitive emissions components at a compressor station, and equipment leaks and sweetening unit affected facilities at onshore natural gas processing plants?
- t. § 60.5411a What additional requirements must I meet to determine initial compliance for my covers and closed vent systems routing emissions from centrifugal compressor wet seal fluid degassing systems, reciprocating compressors, pneumatic pump and storage vessels?
- u. § 60.5412a What additional requirements must I meet for determining initial compliance with control devices used to comply with the emission standards for my centrifugal compressor, and storage vessel affected facilities?
- v. § 60.5413a What are the performance testing procedures for control devices used to demonstrate compliance at my centrifugal compressor, pneumatic pump and storage vessel affected facilities?
- w. § 60.5415a How do I demonstrate continuous compliance with the standards for my well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump, storage vessel, collection of fugitive emissions components at a well site, and collection of fugitive emissions components at a compressor station affected facilities, and affected facilities at onshore natural gas processing plants?
- x. § 60.5416a What are the initial and continuous cover and closed vent system inspection and monitoring requirements for my centrifugal compressor, reciprocating compressor, pneumatic pump, and storage vessel affected facilities?
- y. § 60.5417a What are the continuous control device monitoring requirements for my centrifugal compressor, pneumatic pump, and storage vessel affected facilities?
- z. § 60.5420a What are my notification, reporting, and recordkeeping requirements?
- aa. § 60.5421a What are my additional recordkeeping requirements for my affected facility subject to GHG and VOC requirements for onshore natural gas processing plants?

- bb. § 60.5422a What are my additional reporting requirements for my affected facility subject to GHG and VOC requirements for onshore natural gas processing plants?
- cc. § 60.5423a What additional recordkeeping and reporting requirements apply to my sweetening unit affected facilities at onshore natural gas processing plants?
- dd. § 60.5425a What parts of the General Provisions apply to me?
- ee. § 60.5430a What definitions apply to this subpart?
- ff. § 60.5432a How do I determine whether a well is a low pressure well using the low pressure well equation?
- 13. No later than 30 days after each anniversary date of the issuance of the original Title V operating permit (January 4, 1999), the permittee shall submit to Air Quality Division of the 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. Engine CM-2818 is subject to Compliance Assurance Monitoring (CAM) and shall comply with all applicable requirements and shall perform monitoring as approved below.

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

		Indicator No. 1	Indicator No. 2	Indicator No. 3	Indicator No 4
C.	Monitoring	O ₂ percent monitored	Pressure drop is	Temperature is	Temperature is
	Frequency	continuously.	measured monthly.	measured	measured
				continuously.	continuously.
D.	Data	Records are	Records are	A strip chart records	A strip chart records
	Collection	maintained to	maintained to	the temperature	the temperature
	Procedures	document alarmed	document monthly	continuously or an	continuously or an
		events and any	readings and any	operator or computer	operator or computer
		required maintenance.	required maintenance.	may record at least	may record at least
				once per day.	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.

- 15. The permittee shall maintain records of operations as listed below. These records shall be maintained on site or at a local field office for at least five years after the date of recording and shall be provided to regulatory personnel upon request. [OAC 252:100-8-6(a)(3)(B)]
 - a. Operation, maintenance, and inspection log for the "exempted" engine and for any engine/turbine not tested in each 6-month period.
 - b. Periodic emission testing for each engine/turbine with emission limits.
 - c. Operating hours for the engines if less than 220 hours per quarter and not tested.
 - d. Facility natural gas throughput, MMSCFD (monthly average).
 - e. Analysis of fuel gas sulfur content as required by Specific Condition No. 2.
 - f. Records required by Specific Condition No. 14 for Compliance Assurance Monitoring.
 - g. Record required by 40 CFR Part 60, NSPS, Subpart OOOOa.
 - h. Records required by 40 CFR Part 63, NESHAP, Subparts HH and ZZZZ.
- 16. This permit supersedes all previous Air Quality operating permits for this facility, which are now cancelled. [OAC 252:100-8-6(a)(2)]



SCOTT A. THOMPSON Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT Governor

Mustang Gas Products LLC Attn.: Mr. Steve Hoppe 9800 North Oklahoma Ave. Oklahoma City, OK 73114

Subject: Operating Permit No. 2020-0501-TVR4

Kingfisher East Compressor Station

Facility ID: 1627

Section 1, Township 16N, Range 7W, Kingfisher County, OK

Dear Mr. Hoppe:

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

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

Thank you for your cooperation in this matter. If we may be of further service, please contact Junru Wang at <u>Junru.Wang@deq.ok.gov</u> or (405) 702-4197.

Sincerely,

Phillip Fielder

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 either the applicant or the public requests a public meeting, 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 (a location in the county where the site/facility is located must be included);
- 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 ...locations (one must be in the county where the site/facility is located)... or at the Air Quality Division's main office (see address below). The draft permit is also available for review in the Air Quality Section of DEQ's Web Page: http://www.deq.ok.gov/

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

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.

In addition to the public comment opportunity offered under this notice, this draft permit is subject to U.S. Environmental Protection Agency (EPA) review, EPA objection, and petition to EPA, as provided by 40 CFR § 70.8. [For Construction Permits, add: The requirements of the construction permit will be incorporated into the Title V permit through the administrative amendment process. Therefore, no additional opportunity to provide comments or EPA review, EPA objection, and petitions to EPA will be available to the public when requirements from the construction permit are incorporated into the Title V permit.]

If the Administrator (EPA) does not object to the proposed permit, the public has 60 days following the Administrator's 45 day review period to petition the Administrator to make such an objection as provided in 40 CFR 70.8(d) and in OAC 252:100-8-8(j). Information on all permit actions and applicable review time lines is available in the Air Quality section of the DEQ Web page: http://www.deq.ok.gov/.

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

Phone No. (405) 702-4100.



PART 70 PERMIT

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

Permit No. <u>2020-0501-TVR4</u>

Mustang Gas Products, LLC,
having complied with the requirements of the law, is hereby granted permission to operate the
Kingfisher East Compressor Station located in Section 1, Township 16N, Range 7W
Kingfisher County, Oklahoma, subject to Specific Conditions and Standard Conditions dated
June 21, 2016, both of which are attached:
This permit shall expire five (5) years from the issuance date below, except as authorized under Section VIII of the Standard Conditions.
DRAFT/PROPOSED
DRAF 1/FROF OSED
Division Director Date

Air Quality Division



SCOTT A. THOMPSON **Executive Director**

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT Governor

Mustang Gas Products LLC Attn.: Mr. Steve Hoppe 9800 North Oklahoma Ave. Oklahoma City, OK 73114

Subject: Operating Permit No. 2020-0501-TVR4

Kingfisher East Compressor Station

Facility ID: 1627

Section 1, Township 16N, Range 7W, Kingfisher County, OK

Dear Mr. Hoppe:

Enclosed is the Part 70 permit renewal authorizing operation of the referenced facility. Please note that this permit is issued subject to certain standard and specific conditions, which are attached. These conditions must be carefully followed since they define the limits of the permit and will be confirmed by periodic inspections.

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

Thank you for your cooperation in this matter. If we may be of further service, please contact the permit writer at (405) 702-4197.

Sincerely,

DRAFT/PROPOSED

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

Enclosures



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 (PM₁₀). 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): [OAC 252:100-8-6(c)(2)]
 - (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.

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.

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

- (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.

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

- (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.

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 DEO 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]

Department of Environmental Quality (DEQ) Air Quality Division (AQD) Acronym List

4-15-21

ACFM AD AFRC API ASTM	Actual Cubic Feet per Minute Applicability Determination Air-to-Fuel Ratio Controller American Petroleum Institute American Society for Testing and Materials	H ₂ CO H ₂ S HAP HC HCFC HFR HON	Formaldehyde Hydrogen Sulfide Hazardous Air Pollutants Hydrocarbon Hydrochlorofluorocarbon Horizontal Fixed Roof Hazardous Organic NESHAP
BACT BAE BHP BTU	Best Available Control Technology Baseline Actual Emissions Brake Horsepower (bhp) British thermal unit (Btu)	HP HR I&M	Horsepower (hp) Hour (hr) Inspection and Maintenance Incorporation by Reference
C&E CAA	Compliance and Enforcement Clean Air Act	IBR ICE	Incorporation by Reference Internal Combustion Engine
CAM CAS CAAA CC CCR CD	Compliance Assurance Monitoring Chemical Abstract Service Clean Air Act Amendments Catalytic Converter Continuous Catalyst Regeneration Consent Decree	LAER LB LB/HR LDAR LNG LT	Lowest Achievable Emission Rate Pound(s) [Mass] (lb, lbs, lbm) Pound(s) per Hour (lb/hr) Leak Detection and Repair Liquefied Natural Gas Long Ton(s) (metric)
CEM CFC CFR	Continuous Emission Monitor Chlorofluorocarbon Code of Federal Regulations	M MAAC	Thousand (Roman Numeral) Maximum Acceptable Ambient
CI CNG CO COA COM	Compression Ignition Compressed Natural Gas Carbon Monoxide or Consent Order Capable of Accommodating Continuous Opacity Monitor	MACT MM MMBTU	Concentration Maximum Achievable Control Technology Prefix used for Million (Thousand- Thousand) Million British Thermal Units (MMBtu)
D DEF DG DSCF	Day Diesel Exhaust Fluid Demand Growth Dry Standard (At Standard Conditions) Cubic Foot (Feet)	MMBTUH MMSCF MMSCFD MSDS MWC MWe	Million British Thermal Units per Hour (MMBtu/hr) Million Standard Cubic Feet (MMscf) Million Standard Cubic Feet per Day Material Safety Data Sheet Municipal Waste Combustor Megawatt Electrical
EGU EI EPA ESP EUG EUSGU	Electric Generating Unit Emissions Inventory Environmental Protection Agency Electrostatic Precipitator Emissions Unit Group Electric Utility Steam Generating Unit	NA NAAQS NAICS NESHAP	Nonattainment National Ambient Air Quality Standards North American Industry Classification System National Emission Standards for
FCE FCCU FIP FR	Full Compliance Evaluation Fluid Catalytic Cracking Unit Federal Implementation Plan Federal Register	NH ₃ NMHC NGL NO ₂ NOx	Hazardous Air Pollutants Ammonia Non-methane Hydrocarbon Natural Gas Liquids Nitrogen Dioxide Nitrogen Oxides
GACT GAL GDF GEP GHG GR	Generally Achievable Control Technology Gallon (gal) Gasoline Dispensing Facility Good Engineering Practice Greenhouse Gases Grain(s) (gr)	NOI NSCR NSPS NSR	Notice of Intent Non-Selective Catalytic Reduction New Source Performance Standards New Source Review

O ₃	Ozone	SRU	Sulfur Recovery Unit
0&G	Oil and Gas	/ID	Th.
O&M	Operation and Maintenance	T	Tons
O&NG	Oil and Natural Gas	TAC	Toxic Air Contaminant
OAC	Oklahoma Administrative Code	THC	Total Hydrocarbons
OC	Oxidation Catalyst	TPY	Tons per Year
D. 1 TT		TRS	Total Reduced Sulfur
PAH	Polycyclic Aromatic Hydrocarbons	TSP	Total Suspended Particulates
PAE	Projected Actual Emissions	TV	Title V of the Federal Clean Air Act
PAL	Plant-wide Applicability Limit	, 3	
Pb	Lead	μg/m ³	Micrograms per Cubic Meter
PBR	Permit by Rule	US EPA	U. S. Environmental Protection Agency
PCB	Polychlorinated Biphenyls		
PCE	Partial Compliance Evaluation	VFR	Vertical Fixed Roof
PEA	Portable Emissions Analyzer	VMT	Vehicle Miles Traveled
PFAS	Per- and Polyfluoroalkyl Substance	VOC	Volatile Organic Compound
PM	Particulate Matter	VOL	Volatile Organic Liquid
$PM_{2.5}$	Particulate Matter with an Aerodynamic	VRT	Vapor Recovery Tower
D3.5	Diameter <= 2.5 Micrometers	VRU	Vapor Recovery Unit
PM_{10}	Particulate Matter with an Aerodynamic	T/D	***
DOM.	Diameter <= 10 Micrometers	YR	Year
POM	Particulate Organic Matter or Polycyclic	ACT D	
	Organic Matter	2SLB	2-Stroke Lean Burn
ppb	Parts per Billion	4SLB	4-Stroke Lean Burn
ppm	Parts per Million	4SRB	4-Stroke Rich Burn
ppmv	Parts per Million Volume		
ppmvd	Parts per Million Dry Volume		
PSD	Prevention of Significant Deterioration		
psi	Pounds per Square Inch		
psia	Pounds per Square Inch Absolute		
psig	Pounds per Square Inch Gage		
RACT	Reasonably Available Control		
	Technology		
RATA	Relative Accuracy Test Audit		
RAP	Regulated Air Pollutant		
RFG	Refinery Fuel Gas		
RICE	Reciprocating Internal Combustion		
	Engine		
RO	Responsible Official		
ROAT	Regional Office at Tulsa		
RVP	Reid Vapor Pressure		
SCC	Source Classification Code		
SCF	Standard Cubic Foot		
SCFD	Standard Cubic Feet per Day		
SCFM	Standard Cubic Feet per Minute		
SCR	Selective Catalytic Reduction		
SER	Significant Emission Rate		
SI	Spark Ignition		
SIC	Standard Industrial Classification		
SIP	State Implementation Plan		
SNCR	Selective Non-Catalytic Reduction		
SO ₂	Sulfur Dioxide		
SOx	Sulfur Oxides		
SOP	Standard Operating Procedure		
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