## OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

MEMORANDUM June 28, 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:** Kayla Cunningham, E.I., Existing Source Permit Section

**SUBJECT:** Evaluation of Permit Application No. **2019-0710-TVR2** 

MarkWest Oklahoma Gas Company, LLC Facility: Stuart South Compressor Station

AQD Facility ID: 6191 (SIC 1311/NAICS 211130)

Section 27, Township 4N, Range 11E, Hughes County, OK

Latitude: 34.79607°N, Longitude: 96.12756°W

Directions: From the intersection of OK 31 (OK 31A) and US 270 in Stuart, OK, follow OK 31 approximately 6 mi. south, head west 2 mi. on E1510 Road, and head south slightly more than 2 mi. on N3870 Road. The facility

is on the right just past E1530 Road.

#### SECTION I. INTRODUCTION

MarkWest Oklahoma Gas Company, LLC (MarkWest) has requested the renewal of their current Part 70 operating permit for the Stuart South Compressor Station. The facility is currently operating under Permit No. 2014-1427-TVR, issued January 20, 2015. The facility is a minor source for PSD and a minor source of HAPs.

This renewal permit includes the following changes from the previous permit:

- MarkWest has updated the emission factor for CO for the glycol dehydrator and still vent flare (P-FLARE).
- On July 29, 2019, MarkWest submitted notice of the reactivation of one (1) 210-bbl existing produced water tank. The tank was previously out of service and was not listed in past permits. VOC emissions from the tank are less than 5 TPY, and the tank is considered an insignificant activity.
- On April 30, 2020, MarkWest submitted notice of the like-kind engine replacement of one (1) Caterpillar 3516 engine (P-ENG6). The serial number has been updated.
- On June 7, 2021, MarkWest submitted a request to incorporate 25 hours/year of flare downtime. The lean glycol circulation rate of the dehydration units has been limited to 6.5 GPM to permit this change without increasing any emission limits.

Since the facility emits more than 100 TPY of a regulated pollutant, it is a major source and is subject to Title V permitting requirements. The facility is an area source of HAPs because HAP emissions are below the 10 TPY threshold for a single HAP and below the 25 TPY threshold for any combination of HAPs.

#### SECTION II. PROCESS DESCRIPTION

The facility is a natural gas transmission station responsible for the compression of natural gas into a pipeline. Natural gas is transported to the facility by a pipeline gathering system. Field gas enters the facility through any of three inlet separators, where liquids are separated from the gas stream. The gas is compressed and is then processed by glycol dehydration units before leaving the facility by pipeline. There are two (2) 400-bbl wastewater tanks, one (1) 210-bbl wastewater tank, and three (3) 230-gal methanol tanks. VOC emissions from the wastewater storage tanks, methanol tanks, lube oil tanks, and antifreeze tanks are considered negligible and will not be included in the emission calculations and will not have any permit limits. VOC emissions from the wastewater storage tanks are considered negligible because the contents of the tanks are rainwater from the facility sump drains and water from the inlet separator. There has never been condensate from the inlet separator. Any oils from facility sump drains are heavy oils used in maintenance such as lube or gear oils. Equipment on-site is fueled by natural gas.

#### SECTION III. EQUIPMENT

**EUG 1 Compressor Engines**<sup>(1)</sup>

EOG I Compressor Engines								
EU ID	Description	Description Rating/Capacity Seri		Manufacture Date				
P-ENG1	Caterpillar 3608 <sup>(2)</sup>	2,370 bhp	BEN00513	9/29/2009				
P-ENG2	Caterpillar 3516 <sup>(2)</sup>	1,340 bhp	WPW02482	11/4/2008				
P-ENG3	Caterpillar 3516 <sup>(2)</sup>	1,340 bhp	WPW00895	4/25/2007				
P-ENG4	Caterpillar 3516 <sup>(2)</sup>	1,340 bhp	4EK04647	5/6/2005				
P-ENG5	Caterpillar 3516 <sup>(2)</sup>	1,340 bhp	WPW02789	2/12/2009				
P-ENG6	Caterpillar 3516 <sup>(2)</sup>	1,340 bhp	WPW01867	12/05/2007				
P-ENG7	Caterpillar 3516 <sup>(2)</sup>	1,340 bhp	WPW01689	9/28/2007				
P-ENG8	Caterpillar 3516 <sup>(2)</sup>	1,340 bhp	WPW02409	9/15/2008				
P-ENG9	Caterpillar 3516 <sup>(2)</sup>	1,340 bhp	4EK04551	4/7/2005				
P-ENG10	Caterpillar 3516 <sup>(2)</sup>	1,340 bhp	WPW02377	8/24/2008				
P-ENG11	Caterpillar 3516 <sup>(2)</sup>	1,340 bhp	4EK04930	4/25/2006				
P-ENG12	Caterpillar 3516 <sup>(2)</sup>	1,340 bhp	4EK04337	12/16/2004				

- (1) Engines P-ENG4, P-ENG7, P-ENG8, P-ENG9, P-ENG10, P-ENG11, and P-ENG12 have been removed from the facility.
- (2) Equipped with OC.

**EUG 2 Dehydrators and Control Flare** 

EU ID	Description	Rating/Capacity
P-FLARE	Two (2) Dehydration Units	42 MMSCFD each
	Shared Dehy Flare	1.0 MMBTUH

**EUG 3 Heaters** 

EU ID	Description	Rating/Capacity
P-HEAT1	Dehy Reboiler	1.0 MMBTUH
P-HEAT2	Dehy Reboiler	1.0 MMBTUH

**EUG 4 Fugitives** 

EU ID	Description
P-FUG	Fugitives

#### **SECTION IV. 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, controlled operation and manufacturer's data shown in the following table. Emissions from P-ENG2 through P-ENG12 include control efficiencies of 93% for CO and 80% for H<sub>2</sub>CO. Emissions from P-ENG1 include control efficiencies of 80% for VOC and 93% for CO and H<sub>2</sub>CO.

**Engine Controlled Emission Factors** 

Engine Controlled Emission Factors								
ID	Equipment	NOx	CO	<b>VOC</b> <sup>(1)</sup>	H <sub>2</sub> CO			
Ш	Equipment	g/hp-hr	g/hp-hr	g/hp-hr	g/hp-hr			
P-ENG1	2,370-hp Caterpillar 3608 <sup>(2)</sup>	0.70	0.18	0.30	0.028			
P-ENG2	1,340-hp Caterpillar 3516 <sup>(2)</sup>	1.50	0.13	0.50	0.06			
P-ENG3	1,340-hp Caterpillar 3516 <sup>(2)</sup>	1.50	0.13	0.50	0.06			
P-ENG4	1,340-hp Caterpillar 3516 <sup>(2)</sup>	1.50	0.13	0.50	0.06			
P-ENG5	1,340-hp Caterpillar 3516 <sup>(2)</sup>	1.50	0.13	0.50	0.06			
P-ENG6	1,340-hp Caterpillar 3516 <sup>(2)</sup>	1.50	0.13	0.50	0.06			
P-ENG7	1,340-hp Caterpillar 3516 <sup>(2)</sup>	1.50	0.13	0.50	0.06			
P-ENG8	1,340-hp Caterpillar 3516 <sup>(2)</sup>	1.50	0.13	0.50	0.06			
P-ENG9	1,340-hp Caterpillar 3516 <sup>(2)</sup>	1.50	0.13	0.50	0.06			
P-ENG10	1,340-hp Caterpillar 3516 <sup>(2)</sup>	1.50	0.13	0.50	0.06			
P-ENG11	1,340-hp Caterpillar 3516 <sup>(2)</sup>	1.50	0.13	0.50	0.06			
P-ENG12	1,340-hp Caterpillar 3516 <sup>(2)</sup>	1.50	0.13	0.50	0.06			

- (1) Does not include H<sub>2</sub>CO.
- (2) Equipped with OC.

**Engine Emissions** 

Engine Emissions								
ID	$NO_X$		CO		VOC <sup>(1)</sup>		$H_2CO$	
ID	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
P-ENG1	3.66	16.02	0.91	4.01	1.56	6.87	0.15	0.64
P-ENG2	4.43	19.41	0.39	1.72	1.47	6.47	0.18	0.78
P-ENG3	4.43	19.41	0.39	1.72	1.47	6.47	0.18	0.78
P-ENG4	4.43	19.41	0.39	1.72	1.47	6.47	0.18	0.78
P-ENG5	4.43	19.41	0.39	1.72	1.47	6.47	0.18	0.78
P-ENG6	4.43	19.41	0.39	1.72	1.47	6.47	0.18	0.78

ID	$NO_X$		CO		VOC <sup>(1)</sup>		H <sub>2</sub> CO	
110	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
P-ENG7	4.43	19.41	0.39	1.72	1.47	6.47	0.18	0.78
P-ENG8	4.43	19.41	0.39	1.72	1.47	6.47	0.18	0.78
P-ENG9	4.43	19.41	0.39	1.72	1.47	6.47	0.18	0.78
P-ENG10	4.43	19.41	0.39	1.72	1.47	6.47	0.18	0.78
P-ENG11	4.43	19.41	0.39	1.72	1.47	6.47	0.18	0.78
P-ENG12	4.43	19.41	0.39	1.72	1.47	6.47	0.18	0.78

<sup>(1)</sup> Does not include H<sub>2</sub>CO. H<sub>2</sub>CO is added to VOC only in the facility-wide emissions summary.

#### **GLYCOL DEHYDRATION UNITS**

Emissions from each glycol dehydration unit were estimated using GRI-GLYCalc 4.0, an extended representative gas analysis, a gas throughput of 42 MMSCFD, and a lean glycol circulation rate of 6.5 gallons per minute (GPM). The still vents are controlled by a combustion device with an overall control efficiency of 98%. As part of an alternate operating scenario, the combustion device may be off-line for up to 25 hours per year. Flash gas from the rich glycol flash tanks is recycled back to the process, resulting in 100% control of emissions.

Glycol Dehydrator Emissions, per dehydrator

Glycol Denydrator Emissions, per denydrator						
Parameter	Data					
Type of Glycol	Triethylene					
Glycol Pump Type	Gas Injection					
Gas Flow Rate, MMSCFD	42					
Lean Glycol Circulation Rate Input, GPM <sup>(1)</sup>	6.5					
Regenerator V	ent					
Control Type or Recycle	Combustion Device					
Overall Control Efficiency, %	98					
Max. Uncontrolled Operation, hours/year	25					
VOC Emissions, TPY	0.30					
Flash Tank						
Control Type or Recycle	Recycle/Recompression					
Overall Control Efficiency, %	100					
VOC Emissions, TPY						
Total Emissions,	TPY <sup>(2)</sup>					
Benzene	0.06					
Toluene	0.10					
Ethylbenzene	< 0.01					
Xylene	0.08					
n-Hexane	0.01					
Total HAPs	0.25					
Total VOC	0.30					

- (1) Maximum lean glycol circulation rate is 7.5 GPM.
- (2) Emission rates include up to 25 hours/year of downtime of the combustion device.

Emissions for the dehydrator reboilers are based on AP-42 (7/98), Section 1.4, the rating listed below and a heating value of 1,020 BTU/SCF.

**Dehydration Reboiler Emission Factors** 

Emission Unit	NOx (lb/MMBTU)	CO (lb/MMBTU)	VOC (lb/MMBTU)
P-HEAT1 – 1.0-MMBTUH	0.098	0.082	0.005
P-HEAT2 – 1.0-MMBTUH	0.098	0.082	0.005

**Dehydration Reboiler Emissions** 

Emission Unit	$NO_X$		CO		VOC	
Emission Unit	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
P-HEAT1	0.10	0.43	0.08	0.36	0.01	0.02
P-HEAT2	0.10	0.43	0.08	0.36	0.01	0.02

#### **FLARE**

- P-FLARE, Dehydration Unit Vapor Control

VOC emissions from the glycol dehydration units are based on an overall control efficiency of 98%.

**Flare Combustion Emissions** 

ID	Total Gas Combusted	Emission Factor <sup>(1)</sup> lb/MMBTU		NOx TPY	CO TPY
	MMBTUH	NOx	CO	111	111
P-FLARE	0.93	0.068	0.31	0.28	1.26

<sup>(1)</sup> Based on AP-42 (02/18), Tables 13.5-1 and 13.5-2 for industrial flares.

#### **Flare Pilot Emissions**

ID	Pilot Rating	Emission Factor <sup>(1)</sup> lb/MMSCF			NOx	CO	VOC TPY
	MMBTUH		CO	VOC	TPY	IFI	111
P-FLARE	0.07	100	84	5.5	0.02	0.10	< 0.01

<sup>(1)</sup> Based on AP-42 (07/98), Table 1.4-1 for natural gas combustion and a heating value of 1,020 BTU/SCF.

#### **Flare Destruction Emissions**

Process Point(s)	<b>Emission Point(s)</b>	VOC Emissions, TPY
Glycol Dehydration Units (Total, All Dehydrators)	P-FLARE – Flare	0.61

#### **FUGITIVES**

Emissions from fugitive equipment leaks (P-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.

EU ID	Component	Factor, VOC		Number	VOC Emissions	
EUID	Component	lb/hr/item	Content, %	of Items	lb/hr	TPY
	Gas/vapor valves	0.00992	5.0%	140	0.069	0.304
P-FUG	Light oil valves	0.0055	100%	40	0.220	0.964
r-rud	Water/light oil valves	0.000216	100%	60	0.013	0.057
-	Gas/vapor flanges/conn.	0.00086	5.0%	200	0.010	0.038

EU ID	Component	Factor,	VOC	Number	VOC E	Emissions
EUID	Component	lb/hr/item	Content, %	of Items	lb/hr	TPY
	Light oil flanges/conn.	0.000243	100%	60	0.015	0.064
	Water/light oil flanges/conn.	0.000006	100%	100	0.001	0.003
	Compressor seals	0.0194	5.0%	12	0.012	0.051
	Open-ended lines	0.00441	5.0%	16	0.004	0.016
	Light oil pumps	0.02886	100%	6	0.173	0.758
	Water/light oil pumps	0.000052	100%	8	< 0.001	0.002
	TOT		642	0.52	2.26	

#### **FACILITY-WIDE EMISSIONS**

EU ID	Equipment		$NO_x$		СО		VOC <sup>(1)</sup>	
EUID	Equipment	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	
P-ENG1	2,370-hp Caterpillar 3608 <sup>(2)</sup>	3.66	16.02	0.91	4.01	1.71	7.51	
P-ENG2	1,340-hp Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25	
P-ENG3	1,340-hp Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25	
P-ENG4	1,340-hp Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25	
P-ENG5	1,340-hp Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25	
P-ENG6	1,340-hp Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25	
P-ENG7	1,340-hp Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25	
P-ENG8	1,340-hp Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25	
P-ENG9	1,340-hp Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25	
P-ENG10	1,340-hp Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25	
P-ENG11	1,340-hp Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25	
P-ENG12	1,340-hp Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25	
P-HEAT1	1.0-MMBTUH Dehy Reboiler	0.10	0.43	0.08	0.36	0.01	0.02	
P-HEAT2	1.0-MMBTUH Dehy Reboiler	0.10	0.43	0.08	0.36	0.01	0.02	
P-FLARE	Two (2) 42-MMSCFD Dehydration Units	0.07	0.30	0.31	1.36	$0.14^{(3)}$	$0.61^{(3)}$	
F-FLAKE	1.0-MMBTUH Shared Dehy Flare	0.07	0.30	0.31	1.30	0.14	0.01(3)	
P-FUG Fugitives		-	1	-	-	0.52	2.26	
	Total Emissions		230.69	5.67	25.01	20.54	90.17	
Pre	vious Emissions (2014-1427-TVR)	52.70	231.00	5.75	25.20	18.50	81.00	
	Change in Emissions	-0.04	-0.31	-0.08	-0.19	2.04	9.17	

- (1) Includes formaldehyde.
- (2) Equipped with OC.
- (3) Includes VOC from uncombusted still vent emissions from glycol dehydration units.

The total HAP emissions from the facility are below the 10/25 TPY major source thresholds. Therefore, the facility is an area source for HAPs.

#### SECTION V. INSIGNIFICANT ACTIVITIES

The insignificant activities identified and justified in the application are duplicated below. Records must be available to confirm the insignificance of the activities. Appropriate record-keeping of activities indicated below with "\*" is specified in the Specific Conditions. Any activity to which a state or federal applicable requirement applies is not insignificant even if it is included on this list.

1. Space heaters, boilers, process heaters, and emergency flares less than 5 MMBTUH heat

- input (commercial natural gas). None of these are present but may be in the future.
- 2. \*Storage tanks with a capacity less than or equal to 10,000 gallons that store volatile organic liquids with a true vapor pressure less than or equal to 1.0 psia at maximum storage temperature. This description applies to emissions from the facility's one (1) 210-bbl wastewater tank.
- 3. Emissions from crude oil and condensate marine and truck loading equipment operations at crude oil and natural gas production sites, where the loading rate does not exceed 10,000 gallons per day (gpd) averaged over a 30-day period. No condensate has been produced at this location.
- 4. \*Emissions from storage tanks constructed with a capacity less than 39,894 gallons that store VOC with a vapor pressure less than 1.5 psia at maximum storage temperature. This description applies to emissions from the facility's two (2) 400-bbl wastewater tanks and one (1) 210-bbl wastewater tank.
- 5. Cold degreasing operations utilizing solvents that are denser than air. None are present but may be in the future.
- 6. \*Activities that have potential to emit no more than 5 TPY (actual) of any criteria pollutant. These may include, but are not necessarily limited to, venting, blowdowns, startup, shutdown, and maintenance activities. The three (3) 230-gal methanol tanks and two (2) reboilers (P-HEAT1 and P-HEAT2) emit less than 5 TPY and are considered insignificant activities.

#### SECTION VI. 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]

The purpose of this Subchapter is to incorporate by reference applicable provisions of Title 40 of the Code of Federal Regulations listed in OAC 252:100, Appendix Q. These requirements are addressed in the "Federal Regulations" section.

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

[Applicable]

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

OAC 252:100-5 (Registration, Emissions Inventory and Annual Operating Fees) [Applicable] Subchapter 5 requires sources of air contaminants to register with Air Quality, file emission inventories annually, and pay annual operating fees based upon total annual emissions of regulated pollutants. Emission inventories have been submitted and fees paid for the past years.

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

[Applicable]

<u>Part 5</u> includes the general administrative requirements for part 70 permits. Any planned changes in the operation of the facility which result in emissions not authorized in the permit and which exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to AQD and may require a permit modification. Insignificant activities 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 hazardous air pollutant (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 heaters are subject to the requirements of this subchapter. OAC 252:100, Appendix C specifies a PM emission limitation of 0.60 lb/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<sup>-0.238561</sup>, where E is the allowable emission rate and X is the maximum heat input. Table 3.2-2 of AP-42 (7/00) lists the total PM emissions from 4-stroke, lean-burn, natural gas-fired engines to be 0.01 lb/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/MMSCF 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.

EU ID	Equipment	Maximum Heat Input	Emissions (lb/MMBTU)		
		(MMBTUH)	Appendix C	Potential	
P-ENG1	2,370-hp Caterpillar 3608 Engine	16.02	0.54	0.01	
P-ENG2	1,340-hp Caterpillar 3516 Engine	10.11	0.60	0.01	
P-ENG3	1,340-hp Caterpillar 3516 Engine	10.11	0.60	0.01	

EU ID	Equipment	Maximum Heat Input	Emissions (lb/MMBTU)		
		(MMBTUH)	Appendix C	Potential	
P-ENG4	1,340-hp Caterpillar 3516 Engine	10.11	0.60	0.01	
P-ENG5	1,340-hp Caterpillar 3516 Engine	10.11	0.60	0.01	
P-ENG6	1,340-hp Caterpillar 3516 Engine	10.11	0.60	0.01	
P-ENG7	1,340-hp Caterpillar 3516 Engine	10.11	0.60	0.01	
P-ENG8	1,340-hp Caterpillar 3516 Engine	10.11	0.60	0.01	
P-ENG9	1,340-hp Caterpillar 3516 Engine	10.11	0.60	0.01	
P-ENG10	1,340-hp Caterpillar 3516 Engine	10.11	0.60	0.01	
P-ENG11	1,340-hp Caterpillar 3516 Engine	10.11	0.60	0.01	
P-ENG12	1,340-hp Caterpillar 3516 Engine	10.11	0.60	0.01	
P-HEAT1	1.0-MMBTUH Dehy Reboiler	1.00	0.60	0.008	
P-HEAT2	1.0-MMBTUH Dehy Reboiler	1.00	0.60	0.008	

<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 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

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)

[Part 7 Applicable]

<u>Part 3</u> requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. The lube oil, wastewater, and antifreeze tanks have vapor pressures less than 1.5 psia, and the methanol tanks each have a capacity of less than 400 gallons.

<u>Part 3</u> 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. Therefore, this requirement is not applicable.

Part 5 limits the VOC content of coating used in coating lines or operations. This facility does not normally conduct coating or painting operations except for routine maintenance of the facility and equipment, which is not an affected operation. Owners or operators of sources that emit less than 100 pounds of VOC per 24-hour day are exempt from the requirements of OAC 252:100-37-25.

<u>Part 7</u> requires fuel-burning equipment to be operated and maintained so as to minimize VOC emissions. The equipment at this location is subject to this requirement.

<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. There are no effluent water separators at this location.

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

[Applicable]

This subchapter regulates toxic air contaminants (TAC) that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a modification is approved by the Director. Since no AOC has been designated 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 252:100-7	Minor Sources	Not in source category
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 252:100-39	Nonattainment Areas	Not in area category
OAC 252:100-47	Municipal Solid Waste Landfills	Not in source category

#### SECTION VII. FEDERAL REGULATIONS

Prevention of Significant Deterioration (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 JJJJ Applicable]

<u>Subparts K, Ka, Kb</u>, Storage Vessels for Petroleum Liquids and Volatile Organic Liquid (VOL) Storage Vessels. All of the tanks at the site are not subject because they are smaller than the de minimis size specified by each subpart (19,813 gallons for Subpart Kb and 40,000 gallons for Subparts K and Ka).

Subpart GG, Stationary Gas Turbines. There are no turbines at the facility.

<u>Subpart VV</u>, Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI) for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006. This facility is not a SOCMI plant.

<u>Subpart VVa</u>, Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006. This facility is not a SOCMI plant.

<u>Subpart KKK</u>, Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. This subpart sets standards for natural gas processing plants, which are defined as any site engaged in the extraction of natural gas liquids from field gas, fractionation of natural gas liquids, or both. The facility does not engage in natural gas processing.

<u>Subpart LLL</u>, Onshore Natural Gas Processing: SO<sub>2</sub> Emissions. This subpart affects sweetening units and sweetening units followed by sulfur recovery units constructed, reconstructed, or

modified after January 20, 1984, and on or before August 23, 2011. There is no natural gas sweetening operation at this site.

<u>Subpart IIII</u>, Stationary Compression Ignition Internal Combustion Engines (CI-ICE). There are no compression ignition engines located at this facility.

Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines (SI ICE). This subpart 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). P-ENG4, P-ENG9, P-ENG11, and P-ENG12 were manufactured prior to June 12, 2006, and are not subject to this subpart. P-ENG3, P-ENG6, and P-ENG7 were manufactured after June 12, 2006, and prior to January 1, 2008, and are subject to this subpart; however, there are currently no requirements under this subpart for GAP engines. P-ENG1 was manufactured after July 1, 2007, and is subject to this subpart. P-ENG2, P-ENG5, P-ENG8, and P-ENG10 were manufactured after January 1, 2008, and are subject to this subpart. Operating and maintenance requirements are enumerated in the Specific Conditions.

Stationary SI ICE manufacturers who choose to certify their stationary SI ICE with a maximum engine power greater than or equal to 100-hp under the voluntary manufacturer certification program must certify those engines to the emission standards in Table 1 of Subpart JJJJ. Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100-hp must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE.

Emission Standards from Table 1, Subpart JJJJ, g/hp-hr (ppmvd @ 15%O<sub>2</sub>)

Engine Type & Fuel	Max Power (hp)	Mfg. Date	NOx	CO	VOC
Non-Emergency	hm > 500	7/1/2007	2.0 (160)	4.0 (540)	1.0 (86)
SI Natural Gas <sup>(1)</sup>	$hp \ge 500$	7/1/2010	1.0 (80)	2.0 (270)	0.7 (60)
Non-Emergency SI	500 < hr < 1 250	1/1/2008	2.0 (160)	4.0 (540)	1.0 (86)
Lean Burn Natural Gas	$500 \le \text{hp} < 1,350$	7/1/2010	1.0 (80)	2.0 (270)	0.7 (60)

<sup>(1)</sup> Except lean-burn engines  $500 \le hp < 1,350$ 

<u>Subpart OOOO</u>, Standards of Performance for 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 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 gas wells, natural gas-driven pneumatic controllers operating at a natural gas bleed rate greater than 6 SCFH, or sweetening units at this facility. Additionally, this facility is not a gas plant. The storage vessels on-site have potential emissions less than 6 TPY per tank and are not subject to this subpart. All reciprocating compressors on-site were manufactured prior to August 23, 2011, and are not subject to this subpart.

<u>Subpart OOOOa</u>, Standards of Performance for 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 gas wells, natural gas-driven pneumatic controllers operating at a natural gas bleed rate greater than 6 SCFH, or sweetening units at this facility. Additionally, this facility is not a gas plant. The storage vessels on-site have potential emissions less than 6 TPY per tank and are not subject to this subpart. All reciprocating compressors on-site were manufactured prior to September 18, 2015, and are not subject to this subpart. The fugitive emission components located at the facility are not subject to this subpart since the facility commenced construction before September 18, 2015.

#### 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: Area Sources. 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 84 MMSCFD and emits 0.06 TPY of benzene from each of the two (2) glycol dehydration units. 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.

<u>Subpart ZZZZ</u>, Reciprocating Internal Combustion Engines (RICE). This subpart previously affected only RICE with a site-rating greater than 500 brake horsepower that are located at a major source of HAP emissions. On January 18, 2008, the EPA published a final rule that promulgates standards for new and reconstructed engines (after June 12, 2006) with a site rating less than or equal to 500 HP located at major sources, and for new and reconstructed engines (after June 12, 2006) located at area sources. 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, lean-burn (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).

P-ENG1, P-ENG2, P-ENG3, P-ENG5, P-ENG6, P-ENG7, P-ENG8, and P-ENG10 are considered new affected sources under Subpart ZZZZ and must meet the requirements of NSPS Subpart JJJJ. All applicable requirements have been incorporated into the permit.

P-ENG4, P-ENG9, P-ENG11, and P-ENG12 are considered existing RICE and are affected sources subject to this subpart. A summary of the requirements for the existing RICE at this facility is shown in the following table.

Engine Category	Requirements <sup>(1)</sup>
	a. Change oil and filter every 2,160 hours of operation or annually,
Non-emergency, non-black start	whichever comes first; <sup>(2)</sup>
4SLB remote stationary RICE	b. Inspect spark plugs every 2,160 hours of operation or annually,
>500 HP	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.

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

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

- 1. Stationary RICE located on a pipeline segment that meets both of the following criteria:
  - i. A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with 4 or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.
  - ii. The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.
- 2. Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

Based on information submitted by the applicant, the existing 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 [Not 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.

All engines on-site are equipped with an oxidation catalyst, and the glycol dehydration unit emissions are controlled by a flare. Each of these emission units has pre-control pollutant levels that are less than major source and are not subject.

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). Naturally occurring hydrocarbon mixtures, prior to entry into a natural gas processing plant or a petroleum refining process unit, including: condensate, crude oil, field gas, and produced water, are exempt for the purpose of determining whether more than a threshold quantity of a regulated substance is present at the stationary source. 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 VIII. COMPLIANCE

#### **Tier Classification**

This application has been classified as Tier II based on the request for a renewal of the Title V operating permit. The permittee has submitted an affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certifies that the applicant has a current lease given to accomplish the permitted purpose.

#### **Public Review**

The applicant published the "Notice of Filing a Tier II Application" in *The Hughes County Tribune* newspaper, a local newspaper in Hughes County on September 26, 2019. The notice stated that the application was available for review at the Holdenville Public Library in Hughes County, and also at the Air Quality Division's main office in Oklahoma City. The information on all permit actions is available for review by the public in the Air Quality section of the DEQ web page at <a href="https://www.deq.ok.gov">https://www.deq.ok.gov</a>.

The applicant will be required to publish a "Notice of Tier II Draft Permit" in a newspaper of general circulation in the same county as the facility. The notice will state that the draft permit is available for public review at a location accessible to the public in the same county as the facility, at the AQD main office, and on the Air Quality section of the DEQ web page at <a href="https://www.deq.ok.gov">https://www.deq.ok.gov</a>. On publication of this notice, the 30-day public review period will start.

#### **State Review**

This facility is not located within 50 miles of the Oklahoma border.

#### **EPA Review**

The proposed permit will be sent to EPA for a 45-day concurrent review. If the Administrator does not object in writing during the 45-day EPA review period, any person that meets the requirements of OAC 252:100-8-8 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 OAC 252:100-8-8, 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 OAC 252:100-8-8, 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.

#### **Inspection**

A Full Compliance Evaluation inspection was conducted on March 28, 2019. Alicia Foster and Jennie Doan (Environmental Programs Specialists) conducted the evaluation for the Air Quality Division of the Oklahoma Department of Environmental Quality. Susanne Coolbroth (Environmental Coordinator) and Greg Clark (Environmental Manager) represented MarkWest. No violations of Air Quality rules were noted. The facility was found as described in the permit application.

#### **Testing**

The results of NSPS Subpart JJJJ testing for P-ENG1, P-ENG2, and P-ENG5 were submitted. Additionally, the results of quarterly Portable Emission Analyzer (PEA) tests were provided for P-ENG1, P-ENG2, P-ENG3, P-ENG5 and P-ENG6. The engine test results show compliance with the applicable emission limitations.

NSPS Subpart JJJJ Testing Results for Compressor Engines

			N	$O_X$	(	CO	$\mathbf{V}$	OC
EU ID	D Date Percent Load %		Test Results	JJJJ Standards	Test Results	JJJJ Standards	Test Results	JJJJ Standards
			(g/hp-hr)	(g/hp-hr)	(g/hp-hr)	(g/hp-hr)	(g/hp-hr)	(g/hp-hr)
P-ENG1	05/11/2020	91.5	0.3563	2.00	0.1405	4.00	0.1524	1.00
P-ENG2	10/23/2019	97.3	1.20	2.00	0.01	4.00	0.05	1.00
P-ENG5	10/22/2019	97.8	1.00	2.00	0.01	4.00	0.05	1.00

**Quarterly PEA Engine Emission Testing** 

		$NO_x$		CO	
EU ID	Test Date	Test	Limit	Test	Limit
		(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
P-ENG1	07/17/2020	3.121	3.66	0.612	0.91
P-ENG2	07/17/2020	1.663	4.43	0.293	0.39
P-ENG3	07/17/2020	3.344	4.43	0.074	0.39
P-ENG5	07/17/2020	3.005	4.43	0.056	0.39
P-ENG6	05/28/2020	1.214	4.43	0.298	0.39

All engines tested had emissions less than the applicable limits.

#### Fee Paid

The Title V permit renewal fee of \$7,500 has been paid.

#### **SECTION IX. SUMMARY**

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

# PERMIT TO OPERATE AIR POLLUTION CONTROL FACILITY SPECIFIC CONDITIONS

MarkWest Oklahoma Gas Company, LLC Stuart South Compressor Station

Permit Number 2019-0710-TVR2 Facility ID: 6191

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on June 18, 2019. The Evaluation Memorandum dated June 28, 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 emission limitations:

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

**EUG 1** Compressor Engines

	Commo	N	$NO_X$		O	V(	$\mathbf{C}^{(1)}$
EU ID	Source	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
P-ENG1	Caterpillar 3608 <sup>(2)</sup>	3.66	16.02	0.91	4.01	1.71	7.51
P-ENG2	Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25
P-ENG3	Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25
P-ENG4	Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25
P-ENG5	Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25
P-ENG6	Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25
P-ENG7	Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25
P-ENG8	Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25
P-ENG9	Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25
P-ENG10	Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25
P-ENG11	Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25
P-ENG12	Caterpillar 3516 <sup>(2)</sup>	4.43	19.41	0.39	1.72	1.65	7.25

- (1) Includes H<sub>2</sub>CO.
- (2) Equipped with OC.

#### **EUG 2** Dehvdrators and Control Flare

This EUG contains a flare that serves the glycol dehydrator vents. Each of the two (2) dehydration units is capable of processing 42 MMSCFD. The flare rating is 1 MMBTUH. Emission limitations from the combination of all elements of this EUG follow.

When the flare is used to control emissions, the flare shall be operated as follows:

- a. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
- b. Records of pilot flame(s) outages shall be maintained along with the time and duration of all periods during which the pilot flame is/was absent.

Pollutant	TPY
$NO_X$	0.30
СО	1.36
VOC	0.61

#### **EUG 3** Heaters

Emissions from the equipment listed on the following page do not have a specific limitation, and the emissions are insignificant.

ID	Description	Rating (MMBTUH)	Manufacture Date
P-HEAT1	Reboiler	1.0	8/2008
P-HEAT2	Reboiler	1.0	8/2008

#### **EUG 4** Fugitives

Emissions from the equipment listed below do not have a specific limitation, and the emissions are insignificant.

Component	Approximate Number of Components
Gas/vapor valves	140
Light oil valves	40
Water/light oil valves	60
Gas/vapor flanges/conn.	200
Light oil flanges/conn.	60
Water/light oil flanges/conn.	100
Compressor seals	12
Open-ended lines	16
Light oil pumps	6
Water/light oil pumps	8
TOTAL	642

Emissions of HAP shall not equal or exceed 10 TPY for any individual HAP or 25 TPY for the aggregate of all HAP.

- 2. Each of the twelve engines shall be operated only with exhaust gases passing through a properly functioning oxidation catalyst. [OAC 252:100-8-6(a)(1)]
- 3. The fuel-burning equipment shall be fueled only with gaseous fuel having 343 ppmv or less total sulfur. Compliance shall be shown at least once each calendar year by a current gas company bill, lab analysis, stain-tube analysis, gas contract, tariff sheet, or other approved method.

  [OAC 252:100-31]
- 4. The permittee shall be authorized to operate the facility continuously (24 hours per day, every day of the year). [OAC 252:100-8-6(a)]

- 5. The make, model number, and serial number shall be readily accessible and permanently identified on the engines at the facility. [OAC 252:100-43]
- 6. At least once per calendar quarter, the permittee shall conduct tests of NOx and CO emissions in exhaust gases from the engines in Specific Condition No. 1 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. Testing performed under a previous permit may be used to justify a reduced monitoring frequency, i.e., quarterly to semi-annual or annual, and may be used in lieu of testing required by this permit for an applicable reporting period, i.e., quarterly, six-month, or annual period coinciding with issuance of this permit. Reduced testing frequency does not apply to engines with oxidation or catalytic converters. [OAC 252:100-8-6(a)(3)(A)]
- 7. When periodic compliance testing shows engine exhaust emissions in excess of the lb/hr limits in Specific Condition Number 1, the permittee shall comply with the provisions of OAC 252:100-9 for excess emissions. [OAC 252:100-9]
- 8. 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 NOX 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, lbs/hr, and TPY) at maximum rated horsepower for the altitude/location.
- e. Replacement equipment and emissions are limited to equipment and emissions which are not a modification under NSPS or NESHAP.
- f. Replacement equipment and emissions are limited to equipment and emissions which are not a modification or a significant modification under PSD. For existing PSD facilities, the permittee shall calculate the PTE or the net emissions increase resulting from the replacement to document that it does not exceed significance levels and submit the results with the notice required by paragraph (c) of this Specific Condition. The permittee shall attach each such notice to their copy of the relevant permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield described in OAC 252:100-8-6(d) does not apply to any change made pursuant to this paragraph.
- g. Engines whose installation and operation are authorized under this Specific Condition which are subject to 40 CFR Part 63, Subpart ZZZZ and/or 40 CFR Part 60, Subpart JJJJ shall comply with all applicable requirements.
- 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.
- 9. The glycol dehydration units shall be maintained and operated in accordance with applicable state and federal rules, including but not limited to the following requirements.

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

- a. The natural gas throughput of each glycol dehydration unit shall not exceed 42 MMSCFD, monthly average.
- b. The glycol unit shall be equipped with a flash tank. The flash tank off-gasses shall be routed back to the process (i.e., station inlet) for a collection and control efficiency of 100%.
- c. The lean glycol circulation rate of each glycol dehydration unit shall not exceed 6.5 gallons per minute (GPM), monthly average.
- d. The lean glycol circulation rate of each glycol dehydration unit shall be monitored and recorded at least once every calendar month, as follows.

Circulation rate, as found (gal/min, strokes/min)	
Circulation rate, as left (gal/min, strokes/min)	
Date of inspection	
Inspected by	
1 2	

- e. As an alternative to (d), the monitoring and recordkeeping requirement is waived for any period during which the dehydrator is equipped with a recirculation pump, or any combination of pumps, for which the total rated capacity does not exceed 6.5 GPM. Pump model or rating must be clearly marked.
- f. The dehydration units shall not be operated for more than 25 hours per year without a properly functioning flare to control VOC emissions from the regenerator still vents with an overall control efficiency of at least 98%.

10. All engines at the compressor station that are affected facilities under NSPS Subpart JJJJ shall comply with all sections including, but not necessarily restricted to, the following.

[40 CFR Part 60, Subpart JJJJ]

#### **What This Subpart Covers**

a. §60.4230 Am I subject to this subpart?

#### **Emission Standards for Owners and Operators**

- b. § 60.4233 What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?
- c. § 60.4234 How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

#### Other Requirements for Owners and Operators

- d. § 60.4236 What is the deadline for importing or installing stationary SI ICE produced in the previous model year?
- e. § 60.4237 What are the monitoring requirements if I am an owner or operator of an emergency stationary SI internal combustion engine?

#### **Compliance Requirements for Owners and Operators**

f. § 60.4243 What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?

#### **Testing Requirements for Owners and Operators**

g. § 60.4244 What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

#### Notification, Reports, and Records for Owners and Operators

h. § 60.4245 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

#### **General Provisions**

i. § 60.4246 What parts of the General Provisions apply to me?

#### **Definitions**

- j. §60.4248 What definitions apply to this subpart?
- 11. The permittee shall comply with all applicable requirements of 40 CFR Part 63, NESHAP Subpart HH for Oil and Natural Gas Production for each affected dehydration unit including, but not limited to, 40 CFR §§63.760 through 63.775. 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. [40 CFR Part 63, Subpart HH]
- 12. All engines at the compressor station are affected facilities under 40 CFR Part 63, NESHAP Subpart ZZZZ and shall comply with all applicable sections including, but not necessarily restricted to, the following.

  [40 CFR Part 63, Subpart ZZZZ]

#### **What This Subpart Covers**

- 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?

#### **Emission and Operating Limitations**

- e. § 63.6600 What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?
- f. § 63.6601 What emission limitations must I meet if I own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions?
- g. § 63.6602 What emission limitations and other requirements must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?
- h. § 63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
- i. § 63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE? General Compliance Requirements
- j. § 63.6605 What are my general requirements for complying with this subpart? **Testing and Initial Compliance Requirements**
- k. § 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?
- 1. § 63.6611 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions?
- m. § 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?
- n. § 63.6615 When must I conduct subsequent performance tests?
- o. § 63.6620 What performance tests and other procedures must I use?
- p. § 63.6625 What are my monitoring, installation, collection, operation, and maintenance requirements?
- q. § 63.6630 How do I demonstrate initial compliance with the emission limitations, operating limitations, and other requirements?

#### **Continuous Compliance Requirements**

- r. § 63.6635 How do I monitor and collect data to demonstrate continuous compliance?
- s. § 63.6640 How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

#### Notifications, Reports, and Records

- t. § 63.6645 What notifications must I submit and when?
- u. § 63.6650 What reports must I submit and when?
- v. § 63.6655 What records must I keep?
- w. § 63.6660 In what form and how long must I keep my records?

#### **Other Requirements and Information**

- x. § 63.6665 What parts of the General Provisions apply to me?
- y. § 63.6670 Who implements and enforces this subpart?
- z. § 63.6675 What definitions apply to this subpart?

- 13. The permittee shall keep records as follows. These records shall be retained on-site or at a local field office for a period of at least five years following dates of recording and shall be made available to regulatory personnel upon request. [OAC 252:100-43]
  - a. Periodic testing of NO<sub>X</sub> and CO exhaust from the engines.
  - b. Operating hours of engines/turbines which operated less than 220 hours and were not tested in a quarter.
  - c. O&M log for any engine/turbine not tested in each 3-month period.
  - d. For the fuel(s) burned, the appropriate document(s) as described in Specific Condition (SC) No. 3.
  - e. Dehydration unit natural gas throughput (monthly average and 12-month rolling totals).
  - f. Lean glycol circulation rate (monthly average) and other records as required by SC No. 9.
  - g. Total number of hours per year of flare downtime as required by SC No. 9.
  - h. Records required under NSPS 40 CFR Part 60, Subpart JJJJ and NESHAP 40 CFR Part 63, Subparts HH and ZZZZ.
- 14. The following records shall be maintained on-site to verify Insignificant Activities. No recordkeeping is required for those operations which qualify as Trivial Activities.

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

- a. For fluid storage tanks with a capacity of less than 39,894 gallons and a true vapor pressure less than 1.5 psia: Records of capacity of the tanks and contents.
- b. For storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with a true vapor pressure less than or equal to 1.0 psia at maximum storage temperature: Records of capacity of the tanks and contents.
- c. For activities that have the potential to emit less than 5 TPY (actual) of any criteria pollutant: The type of activity and the amount of emissions from that activity (annual).
- 15. No later than 30 days after each anniversary date of the issuance of the initial Title V operating permit (April 22, 2010), the permittee shall submit to Air Quality Division of DEQ, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit.

  [OAC 252:100-8-6 (c)(5)(A) & (D)]
- 16. This permit supersedes and replaces all previous Air Quality operating permits issued to this facility, which are now canceled.



### 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>2019-0710-TVR2</u>

MarkWest Oklahoma Gas Company, LLC,
having complied with the requirements of the law, is hereby granted permission to operate the
Stuart South Compressor Station located in Section 27, Township 4N, Range 11E, Hughes
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 date of issuance, except as authorized under Section VIII of the Standard Conditions.

Kendal Stegmann, Division Director	
Air Quality Division	



SCOTT A. THOMPSON Executive Director

#### OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT Governor

MarkWest Oklahoma Gas Company, LLC

Attn.: Ms. Rebecca Kileo

1515 Arapahoe Street, Tower 1, Suite 1600

Denver, CO 80202

Subject: Operating Permit No. 2019-0710-TVR2

**Stuart South Compressor Station** 

AQD Facility ID: 6191

Section 27, Township 4N, Range 11E, Hughes County, OK

Dear Ms. Kileo:

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 Kayla Cunningham at Kayla.Cunningham@deq.ok.gov or (405) 702-4187.

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: https://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: <a href="https://www.deq.ok.gov/">https://www.deq.ok.gov/</a>.

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.

# Department of Environmental Quality (DEQ) Air Quality Division (AQD) Acronym List 4-15-21

ACFM	Actual Cubic Feet per Minute	$H_2CO$	Formaldehyde
AD	Applicability Determination	$H_2S$	Hydrogen Sulfide
AFRC	Air-to-Fuel Ratio Controller	HAP	Hazardous Air Pollutants
API	American Petroleum Institute	HC	Hydrocarbon
ASTM	American Society for Testing and	HCFC	Hydrochlorofluorocarbon
	Materials	HFR	Horizontal Fixed Roof
		HON	Hazardous Organic NESHAP
BACT	Best Available Control Technology	HP	Horsepower (hp)
BAE	Baseline Actual Emissions	HR	Hour (hr)
BHP	Brake Horsepower (bhp)		
BTU	British thermal unit (Btu)	I&M	Inspection and Maintenance
		IBR	Incorporation by Reference
C&E	Compliance and Enforcement	ICE	Internal Combustion Engine
CAA	Clean Air Act		
CAM	Compliance Assurance Monitoring	LAER	Lowest Achievable Emission Rate
CAS	Chemical Abstract Service	LB	Pound(s) [Mass] (lb, lbs, lbm)
CAAA	Clean Air Act Amendments	LB/HR	Pound(s) per Hour (lb/hr)
CC	Catalytic Converter	LDAR	Leak Detection and Repair
CCR	Continuous Catalyst Regeneration	LNG	Liquefied Natural Gas
CD	Consent Decree	LT	Long Ton(s) (metric)
CEM	Continuous Emission Monitor		
CFC	Chlorofluorocarbon	M	Thousand (Roman Numeral)
CFR	Code of Federal Regulations	MAAC	Maximum Acceptable Ambient
CI	Compression Ignition		Concentration
CNG	Compressed Natural Gas	MACT	Maximum Achievable Control Technology
CO	Carbon Monoxide or Consent Order	MM	Prefix used for Million (Thousand-
COA	Capable of Accommodating		Thousand)
COM	Continuous Opacity Monitor	MMBTU	Million British Thermal Units (MMBtu)
		MMBTUH	<u>*</u>
D	Day		(MMBtu/hr)
DEF	Diesel Exhaust Fluid	MMSCF	Million Standard Cubic Feet (MMscf)
DG	Demand Growth	MMSCFD	Million Standard Cubic Feet per Day
DSCF	Dry Standard (At Standard Conditions)	MSDS	Material Safety Data Sheet
	Cubic Foot (Feet)	MWC	Municipal Waste Combustor
		MWe	Megawatt Electrical
EGU	Electric Generating Unit		
EI	Emissions Inventory	NA NA A OG	Nonattainment
EPA	Environmental Protection Agency	NAAQS	National Ambient Air Quality Standards
ESP	Electrostatic Precipitator	NAICS	North American Industry Classification
EUG	Emissions Unit Group	NIEGILAD	System National Emission Standards for
EUSGU	Electric Utility Steam Generating Unit	NESHAP	National Emission Standards for
ECE	E-11 Compliance Evaluation	NIII	Hazardous Air Pollutants
FCE FCCU	Full Compliance Evaluation	NH <sub>3</sub> NMHC	Ammonia
FIP	Fluid Catalytic Cracking Unit Federal Implementation Plan		Non-methane Hydrocarbon Natural Gas Liquids
	1	NGL NO:	•
FR	Federal Register	NO <sub>2</sub> NOx	Nitrogen Dioxide Nitrogen Oxides
GACT	Generally Achievable Central Technology	NOI	Notice of Intent
GAC1 GAL	Generally Achievable Control Technology Gallon (gal)	NOI NSCR	Non-Selective Catalytic Reduction
GAL	Gasoline Dispensing Facility	NSPS	New Source Performance Standards
GEP	Good Engineering Practice	NSR	New Source Review
GHG	Greenhouse Gases	1101	New Bource Review
GR	Grain(s) (gr)		
JK	Grain(6) (51)		

O <sub>3</sub>	Ozone	SOP	Standard Operating Procedure
O&G	Oil and Gas	SRU	Sulfur Recovery Unit
O&M	Operation and Maintenance		
O&NG	Oil and Natural Gas	T	Tons
OAC	Oklahoma Administrative Code	TAC	Toxic Air Contaminant
OC	Oxidation Catalyst	THC	Total Hydrocarbons
		TPY	Tons per Year
PAH	Polycyclic Aromatic Hydrocarbons	TRS	Total Reduced Sulfur
PAE	Projected Actual Emissions	TSP	Total Suspended Particulates
PAL	Plant-wide Applicability Limit	TV	Title V of the Federal Clean Air Act
Pb PBR	Lead Permit by Rule	$\mu g/m^3$	Micrograms per Cubic Meter
PCB	Polychlorinated Biphenyls	US EPA	U. S. Environmental Protection Agency
PCE	Partial Compliance Evaluation	CDLIM	O. B. Elivironmental Protection Agency
PEA	Portable Emissions Analyzer	VFR	Vertical Fixed Roof
PFAS	Per- and Polyfluoroalkyl Substance	VMT	Vehicle Miles Traveled
PM	Particulate Matter	VOC	Volatile Organic Compound
$PM_{2.5}$	Particulate Matter with an Aerodynamic	VOL	Volatile Organic Liquid
	Diameter <= 2.5 Micrometers	VRT	Vapor Recovery Tower
PM <sub>10</sub>	Particulate Matter with an Aerodynamic	VRU	Vapor Recovery Unit
POM	Diameter <= 10 Micrometers Particulate Organic Matter or Polycyclic	YR	Year
1 OW	Organic Matter	1 K	i eai
ppb	Parts per Billion	2SLB	2-Stroke Lean Burn
ppm	Parts per Million	4SLB	4-Stroke Lean Burn
ppmv	Parts per Million Volume	4SRB	4-Stroke Rich Burn
ppmvd	Parts per Million Dry Volume		
PSD	Prevention of Significant Deterioration		
psi	Pounds per Square Inch		
psia ngia	Pounds per Square Inch Absolute		
psig	Pounds per Square Inch Gage		
RACT	Reasonably Available Control		
<b>ВАТА</b>	Technology Relative Assume as Test Audit		
RATA RAP	Relative Accuracy Test Audit Regulated Air Pollutant or		
KAI	Reclaimed Asphalt Pavement		
RFG	Refinery Fuel Gas		
RICE	Reciprocating Internal Combustion		
HUCL	Engine 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 SO <sub>2</sub>	Selective Non-Catalytic Reduction Sulfur Dioxide		
SO <sub>2</sub> SO <sub>x</sub>	Sulfur Oxides		
JOA	Sulful Onidos		

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

#### SECTION I. DUTY TO COMPLY

- A. This is a permit to operate / construct this specific facility in accordance with the federal Clean Air Act (42 U.S.C. 7401, et al.) and under the authority of the Oklahoma Clean Air Act and the rules promulgated there under. [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]
- B. The issuing Authority for the permit is the Air Quality Division (AQD) of the Oklahoma Department of Environmental Quality (DEQ). The permit does not relieve the holder of the obligation to comply with other applicable federal, state, or local statutes, regulations, rules, or ordinances.

  [Oklahoma Clean Air Act, 27A O.S. § 2-5-112]
- C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.

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

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

#### SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

- A. Any exceedance resulting from an emergency and/or posing an imminent and substantial danger to public health, safety, or the environment shall be reported in accordance with Section XIV (Emergencies). [OAC 252:100-8-6(a)(3)(C)(iii)(I) & (II)]
- B. Deviations that result in emissions exceeding those allowed in this permit shall be reported consistent with the requirements of OAC 252:100-9, Excess Emission Reporting Requirements.

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

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

#### SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING

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

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

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

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

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

  [OAC 252:100-8-6(a)(3)(C)(i) and (ii)]
- D. If any testing shows emissions in excess of limitations specified in this permit, the owner or operator shall comply with the provisions of Section II (Reporting Of Deviations From Permit Terms) of these standard conditions.

  [OAC 252:100-8-6(a)(3)(C)(iii)]
- E. In addition to any monitoring, recordkeeping or reporting requirement specified in this permit, monitoring and reporting may be required under the provisions of OAC 252:100-43, Testing, Monitoring, and Recordkeeping, or as required by any provision of the Federal Clean Air Act or Oklahoma Clean Air Act.

  [OAC 252:100-43]
- F. Any Annual Certification of Compliance, Semi Annual Monitoring and Deviation Report, Excess Emission Report, and Annual Emission Inventory submitted in accordance with this permit shall be certified by a responsible official. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

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

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

[40 C.F.R. §§60.7 and 63.10, 40 CFR Parts 61, Subpart A, and OAC 252:100, Appendix Q]

- H. The permittee of a facility that is operating subject to a schedule of compliance shall submit to the DEQ a progress report at least semi-annually. The progress reports shall contain dates for achieving the activities, milestones or compliance required in the schedule of compliance and the dates when such activities, milestones or compliance was achieved. The progress reports shall also contain an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted. [OAC 252:100-8-6(c)(4)]
- I. All testing must be conducted under the direction of qualified personnel by methods approved by the Division Director. All tests shall be made and the results calculated in accordance with standard test procedures. The use of alternative test procedures must be approved by EPA. When a portable analyzer is used to measure emissions it shall be setup, calibrated, and operated in accordance with the manufacturer's instructions and in accordance with a protocol meeting the requirements of the "AQD Portable Analyzer Guidance" document or an equivalent method approved by Air Quality.

  [OAC 252:100-8-6(a)(3)(A)(iv), and OAC 252:100-43]
- J. The reporting of total particulate matter emissions as required in Part 7 of OAC 252:100-8 (Permits for Part 70 Sources), OAC 252:100-19 (Control of Emission of Particulate Matter), and OAC 252:100-5 (Emission Inventory), shall be conducted in accordance with applicable testing or calculation procedures, modified to include back-half condensables, for the concentration of particulate matter less than 10 microns in diameter (PM<sub>10</sub>). NSPS may allow reporting of only particulate matter emissions caught in the filter (obtained using Reference Method 5).
- K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

#### SECTION IV. COMPLIANCE CERTIFICATIONS

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

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

- B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source. [OAC 252:100-8-6(c)(5)(C)(i)-(v)]
- C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

  [OAC 252:100-8-5(f) and OAC 252:100-8-6(c)(1)]
- D. Any facility reporting noncompliance shall submit a schedule of compliance for emissions units or stationary sources that are not in compliance with all applicable requirements. This schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with any applicable requirements for which the emissions unit or stationary source is in noncompliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the emissions unit or stationary source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based, except that a compliance plan shall not be required for any noncompliance condition which is corrected within 24 hours of discovery.

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

## SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

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

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

#### SECTION VI. PERMIT SHIELD

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

  [OAC 252:100-8-6(d)(1)]
- B. Those requirements that are applicable are listed in the Standard Conditions and the Specific Conditions of this permit. Those requirements that the applicant requested be determined as not applicable are summarized in the Specific Conditions of this permit. [OAC 252:100-8-6(d)(2)]

#### SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

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

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

#### SECTION VIII. TERM OF PERMIT

- A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance. [OAC 252:100-8-6(a)(2)(A)]
- B. A source's right to operate shall terminate upon the expiration of its permit unless a timely and complete renewal application has been submitted at least 180 days before the date of expiration. [OAC 252:100-8-7.1(d)(1)]
- C. A duly issued construction permit or authorization to construct or modify will terminate and become null and void (unless extended as provided in OAC 252:100-8-1.4(b)) if the construction is not commenced within 18 months after the date the permit or authorization was issued, or if work is suspended for more than 18 months after it is commenced. [OAC 252:100-8-1.4(a)]
- D. The recipient of a construction permit shall apply for a permit to operate (or modified operating permit) within 180 days following the first day of operation. [OAC 252:100-8-4(b)(5)]

#### SECTION IX. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

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

#### SECTION X. PROPERTY RIGHTS

A. This permit does not convey any property rights of any sort, or any exclusive privilege.

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

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued.

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

#### SECTION XI. DUTY TO PROVIDE INFORMATION

A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing,

terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit.

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

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

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

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

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

#### SECTION XII. REOPENING, MODIFICATION & REVOCATION

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

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

- B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances: [OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]
  - (1) Additional requirements under the Clean Air Act become applicable to a major source category three or more years prior to the expiration date of this permit. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
  - (2) The DEQ or the EPA determines that this permit contains a material mistake or that the permit must be revised or revoked to assure compliance with the applicable requirements.
  - (3) The DEQ or the EPA determines that inaccurate information was used in establishing the emission standards, limitations, or other conditions of this permit. The DEQ may revoke and not reissue this permit if it determines that the permittee has submitted false or misleading information to the DEQ.
  - (4) DEQ determines that the permit should be amended under the discretionary reopening provisions of OAC 252:100-8-7.3(b).
- C. The permit may be reopened for cause by EPA, pursuant to the provisions of OAC 100-8-7.3(d). [OAC 100-8-7.3(d)]
- D. The permittee shall notify AQD before making changes other than those described in Section XVIII (Operational Flexibility), those qualifying for administrative permit amendments, or those defined as an Insignificant Activity (Section XVI) or Trivial Activity (Section XVII). The notification should include any changes which may alter the status of a "grandfathered source," as defined under AQD rules. Such changes may require a permit modification.

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

E. Activities that will result in air emissions that exceed the trivial/insignificant levels and that are not specifically approved by this permit are prohibited. [OAC 252:100-8-6(c)(6)]

#### SECTION XIII. INSPECTION & ENTRY

- A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(17) for confidential information submitted to or obtained by the DEQ under this section): [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 DEQ complies with 40 C.F.R. § 70.8(d).
- (7) A copy of the final construction permit is sent to EPA as provided by 40 CFR § 70.8(a).
- (8) The DEQ shall not issue the proposed construction permit until any affected State and EPA have had an opportunity to review the proposed permit, as provided by these permit conditions.
- (9) Any requirements of the construction permit may be reopened for cause after incorporation into the Title V permit by the administrative amendment process, by DEQ as provided in OAC 252:100-8-7.3(a), (b), and (c), and by EPA as provided in 40 C.F.R. § 70.7(f) and (g).
- (10) The DEQ shall not issue the administrative permit amendment if performance tests fail to demonstrate that the source is operating in substantial compliance with all permit requirements.

B. To the extent that these conditions are not followed, the Title V permit must go through the Title V review process.

#### SECTION XXII. CREDIBLE EVIDENCE

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