DRAFT/PROPOSED

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM **June 24, 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: David Schutz, P.E., New Source Permits Section

FROM: Kayla Cunningham, E.I., Existing Source Permit Section

SUBJECT: Evaluation of Permit Application No. **2019-0103-TVR**
MarkWest Oklahoma Gas Company, LLC
Facility: Myer Mountain Compressor Station
AQD Facility ID: 8704 (SIC 1311/NAICS 211130)
Section 23, Township 7N, Range 12E, Pittsburg County, OK
Latitude: 35.07195°N, Longitude: 96.01693°W
Directions: From the Ulan exit on Indian Nations Turnpike, travel 2 miles west on E1310 and E1315, 3½ miles south on N3970 to E1350, just north of Scipio. From Scipio, travel 4 miles west on Four Corners Road (E1350) to N3930 Road. Then travel north ¼ mile and west 1½ miles to a fork. Take the right branch, travel ¼ mile to another fork, and keep to the right. Follow N3915 Road east for 1 mile. Turn left at the fork and drive to the facility.

SECTION I. INTRODUCTION

MarkWest Oklahoma Gas Company, LLC (MarkWest) has requested renewal of their current Part 70 operating permit for the Myer Mountain Compressor Station. The facility is currently operating under Permit No. 2012-094-TV, issued July 29, 2014 and Permit No. 2012-094-C (M-2), issued on September 3, 2013. The facility is a minor source for Prevention of Significant Deterioration (PSD) and a minor source of Hazardous Air Pollutants (HAPs).

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

- MarkWest installed two (2) 8-MMBTUH enclosed flares to control emissions from the condensate, condensate/produced water, and gunbarrel tanks. The storage tank emissions were previously routed to the vapor recovery unit (VRU), which has been replaced by the flares. However, the VRU remains onsite and may be used as a backup device in the event of flare downtime.
- MarkWest installed a condenser and one (1) 1-MMBTUH enclosed flare to control emissions from the glycol dehydration units' still vents. These additions have replaced the existing dehydration flare.
- The description of storage tank TK-3 has been updated to Condensate/Produced Water Tank because it may hold either of these liquids.

- The capacity of gunbarrel tank TK-4 has been corrected from 350-bbl to 500-bbl.
- Produced water tank TK-8 was never installed at the facility. The rainwater tank IDs have been updated from TK-9 and TK-10 to TK-8 and TK-9 in this permit.
- Storage tank emission limits and the associated requirements for compliance demonstrations have been added to Specific Condition 1, EUGs 2 and 3 and Specific Condition 9.g. Review of the existing permit indicated that these additions were necessary to ensure compliance with Title V permitting requirements.
- An alternate operating scenario that allows some of the produced water throughput to be sent to the condensate tanks has been added to Specific Condition 1, EUG 2.
- Specific Conditions 5 and 10.f. in Permit No. 2012-094-TV have been removed. MarkWest completed all H_2CO testing required by these conditions. Therefore, these conditions are no longer applicable.

Each of the listed equipment changes was completed in 2018 and qualified under operational flexibility. Additionally, the Specific Conditions in Permit No. 2012-094-TV allow the replacement of the VRU with a device of at least 95% efficiency, which is achieved by the newly installed tank flares.

On November 29, 2018, December 17, 2018, and February 5, 2019, MarkWest submitted notices of like-kind engine replacements of three (3) Caterpillar 3516 engines (ENG-2, ENG-10, and ENG-11).

Since the facility emits more than 100 TPY of a regulated pollutant, it is subject to Title V permitting requirements. Based on data provided by the applicant, the facility has emissions of 159.48 TPY NOx, 101.26 TPY CO, 121.05 TPY VOC, and 17.35 TPY HAPs, the most significant being 9.04 TPY H_2CO. This facility, therefore, is a major source because the controlled emissions of several criteria pollutants are above 100 TPY.

Emission units (EUs) have been arranged into EUGs as outlined in Section III. Field-grade natural gas is the primary fuel with the facility being operated continuously.

SECTION II. PROCESS DESCRIPTION

Natural gas is transported to the facility by a pipeline gathering system. Field gas enters the facility through an inlet separator, where produced water and condensate are separated from the gas stream. After being compressed and processed by glycol dehydration units, the gas leaves the facility by pipeline. Liquids from the inlet separator are sent to the gunbarrel tank, from which they are gravity-separated into the condensate and condensate/produced water tanks. Vapors from the condensate, condensate/produced water, and gunbarrel tanks are controlled by enclosed flares. Emissions from the dehydration still vents are controlled by a condenser and an enclosed flare.

SECTION III. EQUIPMENT

EUG 1. Natural Gas-Fired Internal Combustion Engines

EU ID	Make/Model	Rating	Serial No.	Install Date	Manufacture Date
ENG-1	Caterpillar 3516B[(1)]	1,380 hp	JEF01733	04/30/2014	05/11/2012
ENG-2	Caterpillar 3516[(1)]	1,340 hp	WPW00618	02/05/2019	11/12/2006

EU ID	Make/Model	Rating	Serial No.	Install Date	Manufacture Date
ENG-3	Caterpillar 3516(1)	1,340 hp	WPW00275	09/07/2016	06/26/2006
ENG-4	Caterpillar 3516(1)	1,340 hp	WPW00604	07/21/2013	03/8/2007
ENG-5	Caterpillar 3608(1)	2,370 hp	BEN00803	12/24/2012	10/23/2012
ENG-6	Caterpillar 3608(1)	2,370 hp	BEN00804	01/23/2013	10/24/2012
ENG-7	Caterpillar 3608(1)	2,370 hp	BEN00805	01/24/2013	10/25/2012
ENG-8	Caterpillar 3516B(1)	1,380 hp	JEF01723	11/16/2012	05/8/2012
ENG-9	Caterpillar 3516B(1)	1,380 hp	JEF01730	11/6/2012	05/10/2012
ENG-10	Caterpillar 3516(1)	1,340 hp	WPW01663	12/06/2018	09/17/2007
ENG-11	Caterpillar 3516(1)	1,340 hp	WPW00407	12/22/2018	09/14/2006
ENG-12	Caterpillar 3516B(1)	1,380 hp	JEF01204	09/14/2013	05/19/2011

(1) Equipped with oxidation catalyst (OC).

EUG 2. Storage Tanks and Flares

EU ID	Description	Capacity/Rating	Install Date
TK-1	Condensate Tank	400 bbl	2012
TK-2	Condensate Tank	400 bbl	2012
TK-3	Condensate/Produced Water Tank	400 bbl	2012
TK-4	Gunbarrel Tank	500 bbl	2012
TK-5	Condensate Tank	400 bbl	2012
TK-6	Condensate Tank	400 bbl	2012
TK-7	Condensate Tank	400 bbl	2012
TK-8	Rainwater Tank	210 bbl	2013
TK-9	Rainwater Tank	210 bbl	2013
F-2	Flare	8.0 MMBTUH	2018
F-3	Flare	8.0 MMBTUH	2018

EUG 3. Loading

EU ID	Description	Install Date
CLOAD-1	Condensate Loading	2012
WLOAD-1	Produced Water Loading	2012

EUG 4. Glycol Dehydration Units and Flares

EU ID	Description	Rating	Install Date
DEHY-1	Dehydrator	50 MMSCFD	2012
DEHY-2	Dehydrator	50 MMSCFD	2012
F-1	Flare	1.0 MMBTUH	2018

EUG 5. Reboilers

EU ID	Description	Rating	Install Date
H-1	Dehy Reboiler	1.0 MMBTUH	2012
H-2	Dehy Reboiler	1.0 MMBTUH	2012

EUG 6. Fugitives

EU ID	Description	Install Date
FUG-1	Fugitives	02/2008

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 operation and manufacturer's data shown in the following table.

Engine Emission Factors

Emission Unit	Equipment	NOx	CO	VOC[(1)]
		g/hp-hr	g/hp-hr	g/hp-hr
ENG-1	1,380-hp Caterpillar 3516B[(2)]	0.50	0.60	0.49
ENG-2	1,340-hp Caterpillar 3516[(2)]	1.50	0.40	0.19
ENG-3	1,340-hp Caterpillar 3516[(2)]	1.50	0.40	0.19
ENG-4	1,340-hp Caterpillar 3516[(2)]	1.50	0.40	0.19
ENG-5	2,370-hp Caterpillar 3608[(2)]	0.50	0.58	0.66
ENG-6	2,370-hp Caterpillar 3608[(2)]	0.50	0.58	0.66
ENG-7	2,370-hp Caterpillar 3608[(2)]	0.50	0.58	0.66
ENG-8	1,380-hp Caterpillar 3516B[(2)]	0.50	0.60	0.49
ENG-9	1,380-hp Caterpillar 3516B[(2)]	0.50	0.60	0.49
ENG-10	1,340-hp Caterpillar 3516[(2)]	1.50	0.40	0.19
ENG-11	1,340-hp Caterpillar 3516[(2)]	1.50	0.40	0.19
ENG-12	1,380-hp Caterpillar 3516B[(2)]	0.50	0.60	0.49

(1) Does not include H_2CO.
(2) Equipped with OC.

GLYCOL DEHYDRATION UNITS

Emissions from the glycol dehydration units were estimated using GRI-GLYCalc 4.0, an extended representative gas analysis, a gas throughput of 50 MMSCFD, and a lean glycol circulation rate of 9.63 GPM. The still vents are controlled by a condenser and an enclosed flare with an overall control efficiency of 98%. The flash gas from the rich glycol flash tanks is recycled back to the process, resulting in 100% control of emissions.

Glycol Dehydrator Emissions

Parameter	Data for DEHY-1	Data for DEHY-2
Type of Glycol	Triethylene	Triethylene
Gas Flow Rate, MMSCFD	50	50
Lean Glycol Circulation Rate Input, GPM	9.63	9.63
Regenerator Vent		
Control Type or Recycle	Condenser and Flare	Condenser and Flare
Overall Control Efficiency, %	98	98
VOC Emissions, TPY	1.67	1.67
Flash Tank		
Control Type or Recycle	Recycle/Recompression	Recycle/Recompression
Overall Control Efficiency, %	100	100
VOC Emissions, TPY	--	--

Parameter	Data for DEHY-1	Data for DEHY-2
Total Emissions, TPY		
VOC	1.67	1.67
Benzene	0.20	0.20
Toluene	0.31	0.31
Ethylbenzene	0.09	0.09
Xylene	<0.01	<0.01
n-Hexane	<0.01	<0.01
Total HAPs	**0.60**	**0.60**

Emissions for the dehydrator reboiler are based on AP-42 (7/98), Section 1.4, the rating listed below, and a heating value of 1,246 BTU/SCF.

Dehydration Reboiler Emission Factors

Emission Unit	NOx (lb/MMBTU)	CO (lb/MMBTU)	VOC (lb/MMBTU)
H-1 – 1.0-MMBTUH	0.098	0.082	0.005
H-2 – 1.0-MMBTUH	0.098	0.082	0.005

Dehydration Reboiler Emissions

Emission Unit	NO_X		CO		VOC	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
H-1	0.08	0.35	0.07	0.30	<0.01	0.02
H-2	0.08	0.35	0.07	0.30	<0.01	0.02

TANKS

Initially, all liquids flow through the gunbarrel tank, where flashing occurs as liquids under pressure enter the tank at atmospheric pressure. Condensate and produced water are separated before entering their respective storage tanks. Working and breathing losses for the condensate tanks are based on EPA TANKS 4.0.9d, assuming the tank contents to be Gasoline (RVP 13). For the scenario in which produced water flows to the condensate/produced water tank (TK-3), working and breathing losses for this tank were calculated using condensate, assuming 1% is emitted. Condensate and produced water tank emissions do not include flash emissions because all flashing occurs at the gunbarrel tank. Working, breathing, and flashing emissions from the gunbarrel tank are based on E&P Tank V4.0. Emissions from all storage tanks are controlled by enclosed flares (F-2 and F-3) with an overall control efficiency of 95%. The following emissions data represents a worst-case scenario in which annual throughput is considered to flow through the smallest-sized tank, or one (1) 400-bbl tank in this case. This scenario allows the facility to track facility-wide throughput of condensate and produced water as a compliance measure.

Storage Tank Emissions, per Tank

Parameter	Condensate Tanks	Produced Water Tank	Gunbarrel Tank
Tank Emission Units	TK-1, TK-2, TK-5, TK-6, TK-7	TK-3[(1)]	TK-4
Throughput, gal/yr	428,000[(2)]	2,140,000[(3)]	4,280,000
Flash Calculation Method/Tool	--	--	E&P Tank V4.0
Working/Breathing Method/Tool	EPA TANKS 4.0.9d	EPA TANKS 4.0.9d	E&P Tank V4.0

Parameter	Condensate Tanks	Produced Water Tank	Gunbarrel Tank
Control Type	Flare	Flare	Flare
Flare Capture Efficiency	98%	98%	98%
Flare Control Efficiency	97%	97%	97%
VOC Emissions Emitted at Tank, TPY	0.064	<0.01	1.88
VOC Emissions Emitted at Flare, TPY	0.094	<0.01	2.83
VOC Emissions, TPY	0.158	<0.01	4.71

(1) TK-3 may store condensate as part of an alternate operating scenario.
(2) This throughput per tank is based on operation of five (5) condensate storage tanks. The actual value may vary if some of the condensate tanks are used as produced water tanks in an alternate operating scenario.
(3) Some of the water throughput may be sent to the condensate tanks as part of an alternate operating scenario.

LOADING

Emissions from loading condensate into tank trucks were estimated using AP-42 (6/08), Section 5.2, Equation 1, and the parameters listed in the table below. The molecular weight (MW) listed is based on AP-42 (11/06), Section 7.1 calculations.

Loading Parameters and Emissions

Parameter	CLOAD-1	WLOAD-1
Liquids Loaded	Condensate	Produced Water
Throughput, gal/yr	2,140,000	2,140,000
Saturation Factor	0.6	0.6
Temp., ^{o}F	61.89	61.89
TVP, psia	7.24	7.24
MW, lb/lbmol	62	62
VOC, wt.%	100	1
Emission Factor, lb/10^3 gal	6.43	0.06
VOC Emissions, TPY	**6.88**	**0.07**

FLARES

- *F-1, F-2, F-3, Tank and Dehydration Unit Vapor Control*

VOC emissions from the condensate, produced water, and gunbarrel tanks are based on 98% capture efficiency and 97% destruction efficiency. VOC emissions from the glycol dehydration units are based on an overall control efficiency of 98%.

Flare Combustion Emissions

ID	Total Gas Combusted MMBTUH	Emission Factor[(1)] lb/MMBTU		NOx TPY	CO TPY
		NOx	CO		
F-1	1.00	0.068	0.31	0.13	0.59
F-2	8.00	0.068	0.31	0.33	1.54
F-3	8.00	0.068	0.31	0.33	1.54

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

Flare Pilot Emissions

ID	Pilot Rating MMBTUH	Emission Factor[(1)] lb/MMSCF			NOx TPY	CO TPY	VOC TPY
		NOx	CO	VOC			
F-1	0.04	100	84	5.5	0.02	0.01	<0.01
F-2	0.04	100	84	5.5	0.02	0.01	<0.01
F-3	0.04	100	84	5.5	0.02	0.01	<0.01

(1) Based on AP-42 (07/98), Table 1.4-1 for natural gas combustion.

Flare Destruction Emissions

Process Point(s)	Emission Point(s)	VOC Emissions, TPY
Tanks (Total, All Tanks)	F-2, F-3 – Flares	3.30
Glycol Dehydration Units (Total, All Dehydrators)	F-1 – Flare	3.34

FUGITIVES

Emissions from fugitive equipment leaks (FUG-1) 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, kg/hr/item	VOC Content, %	Number of Items	VOC Emissions	
					lb/hr	TPY
FUG-1	Gas/vapor valves	0.0045	19.1%	180	0.341	1.494
	Light oil valves	0.0025	100%	75	0.413	1.811
	Water/light oil valves	0.000098	100%	75	0.016	0.071
	Gas/vapor flanges/conn.	0.00039	19.1%	180	0.030	0.129
	Light oil flanges/conn.	0.00011	100%	75	0.018	0.080
	Water/light oil flanges/conn.	0.0000027	100%	75	<0.001	0.002
	Compressor seals	0.0088	19.1%	12	0.044	0.195
	Open-ended lines	0.002	19.1%	12	0.010	0.044
	Light oil pumps	0.013	100%	12	0.344	1.506
	Water/light oil pumps	0.000024	100%	12	0.001	0.003
	TOTAL			**708**	**1.22**	**5.34**

FACILITY-WIDE EMISSIONS

Facility-Wide Emissions

EU ID	Equipment	NO_x		CO		VOC[(1)]	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
ENG-1	1,380-hp Caterpillar 3516B Engine[(2)]	1.52	6.66	1.81	7.94	1.70	7.44
ENG-2	1,340-hp Caterpillar 3516 Engine[(2)]	4.43	19.40	1.17	5.12	0.67	2.93
ENG-3	1,340-hp Caterpillar 3516 Engine[(2)]	4.43	19.40	1.17	5.12	0.67	2.93
ENG-4	1,340-hp Caterpillar 3516 Engine[(2)]	4.43	19.40	1.17	5.12	0.67	2.93
ENG-5	2,370-hp Caterpillar 3608 Engine[(2)]	2.61	11.43	3.01	13.20	3.67	16.05
ENG-6	2,370-hp Caterpillar 3608 Engine[(2)]	2.61	11.43	3.01	13.20	3.67	16.05
ENG-7	2,370-hp Caterpillar 3608 Engine[(2)]	2.61	11.43	3.01	13.20	3.67	16.05
ENG-8	1,380-hp Caterpillar 3516B Engine[(2)]	1.52	6.66	1.81	7.94	1.70	7.44
ENG-9	1,380-hp Caterpillar 3516B Engine[(2)]	1.52	6.66	1.81	7.94	1.70	7.44
ENG-10	1,340-hp Caterpillar 3516 Engine[(2)]	4.43	19.40	1.17	5.12	0.67	2.93

EU ID	Equipment	NO_x		CO		VOC[1]	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
ENG-11	1,340-hp Caterpillar 3516 Engine[2]	4.43	19.40	1.17	5.12	0.67	2.93
ENG-12	1,380-hp Caterpillar 3516B Engine[2]	1.52	6.66	1.81	7.94	1.70	7.44
H-1	1.0-MMBTUH Dehy Reboiler	0.08	0.35	0.07	0.30	<0.01	0.02
H-2	1.0-MMBTUH Dehy Reboiler	0.08	0.35	0.07	0.30	<0.01	0.02
F-1	1.0-MMBTUH Flare	0.03	0.15	0.01	0.60	0.76[3]	3.34[3]
F-2	8.0-MMBTUH Flare	0.08	0.35	0.35	1.55	0.75[4]	3.30[4]
F-3	8.0-MMBTUH Flare	0.08	0.35	0.35	1.55		
DEHY-1	50-MMSCFD Glycol Dehydration Unit	-	-	-	-	0.38	1.67
DEHY-2	50-MMSCFD Glycol Dehydration Unit	-	-	-	-	0.38	1.67
FUG-1	Fugitives	-	-	-	-	1.22	5.34
CLOAD-1	Condensate Loading	-	-	-	-	-	6.88
WLOAD-1	Produced Water Loading	-	-	-	-	-	0.07
TK-1	400-bbl Condensate Tank[5]	-	-	-	-	0.50[6]	2.20[6]
TK-2	400-bbl Condensate Tank[5]	-	-	-	-		
TK-3	400-bbl Produced Water Tank[5]	-	-	-	-		
TK-4	500-bbl Gunbarrel Tank[5]	-	-	-	-		
TK-5	400-bbl Condensate Tank[5]	-	-	-	-		
TK-6	400-bbl Condensate Tank[5]	-	-	-	-		
TK-7	400-bbl Condensate Tank[5]	-	-	-	-		
TK-8	210-bbl Rainwater Tank	-	-	-	-	-	-
TK-9	210-bbl Rainwater Tank	-	-	-	-	-	-
SSMM	Startup, Shutdown, Malfunction	-	-	-	-	-	4.00
Total Emissions		**36.41**	**159.48**	**22.97**	**101.26**	**25.13**	**121.05**
Previous Emissions (2012-094-TV)		**-**	**160.00**	**-**	**102.00**	**-**	**110.00**
Change in Emissions		**-**	**-0.52**	**-**	**-0.74**	**-**	**11.05**

(1) Includes formaldehyde.
(2) Equipped with OC.
(3) Includes VOC from uncombusted still vent emissions from glycol dehydration units.
(4) Includes VOC from uncombusted working, breathing, and flashing emissions from tanks and pilot emissions.
(5) Includes uncaptured breathing, working, and flashing losses.
(6) A combined emission limit was requested for the storage tanks. Since the total controlled emissions from all storage tanks are less than 6 TPY, individual tank throughput limits are not needed.

HAP EMISSIONS

For the engines, the primary HAP of concern is H_2CO. Estimates of H_2CO emissions are based on factors in AP-42 (7/00), Section 3.2. The table below lists estimated H_2CO emissions for the compressor engines.

Engine H_2CO Emissions

EU ID	Description	Emission Factors g/hp-hr	H_2CO Emissions	
			lb/hr	TPY
ENG-1	1,380-hp Caterpillar 3516B Engine	0.067	0.20	0.89
ENG-2	1,340-hp Caterpillar 3516 Engine	0.040	0.12	0.52
ENG-3	1,340-hp Caterpillar 3516 Engine	0.040	0.12	0.52
ENG-4	1,340-hp Caterpillar 3516 Engine	0.040	0.12	0.52
ENG-5	2,370-hp Caterpillar 3608 Engine	0.042	0.22	0.96

EU ID	Description	Emission Factors g/hp-hr	H_2CO Emissions	
			lb/hr	TPY
ENG-6	2,370-hp Caterpillar 3608 Engine	0.042	0.22	0.96
ENG-7	2,370-hp Caterpillar 3608 Engine	0.042	0.22	0.96
ENG-8	1,380-hp Caterpillar 3516B Engine	0.067	0.20	0.89
ENG-9	1,380-hp Caterpillar 3516B Engine	0.067	0.20	0.89
ENG-10	1,340-hp Caterpillar 3516 Engine	0.040	0.12	0.52
ENG-11	1,340-hp Caterpillar 3516 Engine	0.040	0.12	0.52
ENG-12	1,380-hp Caterpillar 3516B Engine	0.067	0.20	0.89
Total			**2.06**	**9.04**

Non-H_2CO HAP emissions from the engines are 7.11 TPY, and total HAP emissions from the glycol dehydrators are 1.20 TPY. 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 and listed in OAC 252:100-8, Appendix I, are listed below.

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. The rainwater tanks (TK-8 and TK-9) fit this description. Recordkeeping is required.
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. Recordkeeping is required.
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. Recordkeeping is required.
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. Recordkeeping is required.

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.

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]
Part 5 includes the general administrative requirements for part 70 permits. Any planned changes in the operation of the facility which result in emissions not authorized in the permit and which exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to 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 heater are subject to the requirements of this subchapter. OAC 252:100, Appendix C specifies a PM emission limitation of 0.60 lbs/MMBTU for all equipment at this facility with a heat input rating of 10

MMBTUH or less. OAC 252:100, Appendix C specifies a PM emission limitation for all equipment at this facility with a heat input rating of greater than 10 MMBTUH but less than 1,000 MMBTUH based on the following calculation: $E = 1.0428080X^{-0.238561}$, where E is the allowable emission rate and X is the maximum heat input. Table 3.2-2 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 (MMBTUH)	Emissions (lb/MMBTU)	
			Appendix C	Potential
ENG-1	1,380-hp Caterpillar 3516B Engine	10.3	0.60	0.01
ENG-2	1,340-hp Caterpillar 3516 Engine	10.1	0.60	0.01
ENG-3	1,340-hp Caterpillar 3516 Engine	10.1	0.60	0.01
ENG-4	1,340-hp Caterpillar 3516 Engine	10.1	0.60	0.01
ENG-5	2,370-hp Caterpillar 3608 Engine	16.1	0.54	0.01
ENG-6	2,370-hp Caterpillar 3608 Engine	16.1	0.54	0.01
ENG-7	2,370-hp Caterpillar 3608 Engine	16.1	0.54	0.01
ENG-8	1,380-hp Caterpillar 3516B Engine	10.3	0.60	0.01
ENG-9	1,380-hp Caterpillar 3516B Engine	10.3	0.60	0.01
ENG-10	1,340-hp Caterpillar 3516 Engine	10.1	0.60	0.01
ENG-11	1,340-hp Caterpillar 3516 Engine	10.1	0.60	0.01
ENG-12	1,380-hp Caterpillar 3516B Engine	10.3	0.60	0.01
H-1	1.0-MMBTUH Dehy Reboiler	1.0	0.60	0.008
H-2	1.0-MMBTUH Dehy Reboiler	1.0	0.60	0.008

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

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
No discharge of greater than 20% opacity is allowed except for short-term occurrences 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.
Part 5 limits sulfur dioxide emissions from new petroleum or natural gas process equipment (constructed after July 1, 1972). For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For fuel gas having a gross calorific value of 1,000 BTU/SCF, this limit corresponds to fuel sulfur content of 1,203 ppmv. Gas produced from oil and gas wells having 343 ppmv or less total sulfur will ensure compliance with Subchapter 31. The permit requires the use of pipeline-grade natural gas or field gas with a maximum sulfur content of 343 ppmv for all fuel-burning equipment to ensure compliance with Subchapter 31.

OAC 252:100-33 (Nitrogen Oxides) [Not Applicable]
This subchapter limits new gas-fired fuel-burning equipment with rated heat input greater than or equal to 50 MMBTUH to emissions of 0.2 lb of NOx per MMBTU. There are no equipment items that exceed the 50 MMBTUH threshold.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]
This facility has none of the affected sources: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit or petroleum catalytic reforming unit.

OAC 252:100-37 (Volatile Organic Compounds) [Part 7 Applicable]
Part 3 requires storage tanks constructed after December 28, 1974, with a capacity of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. All tanks are submerged fill and are further controlled by enclosed flares.
Part 3 requires VOC loading facilities with a throughput equal to or less than 40,000 gallons per day to be equipped with a system for submerged filling of tank trucks or trailers if the capacity of the vehicle is greater than 200 gallons. The facility will not reach the 40,000-gallon threshold.
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.
Part 7 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.
Part 7 requires all effluent water separator openings that 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. VRU systems are expected to collect at least 95% of emissions. The gunbarrel tank is an effluent water separator, and its vapors were previously routed to a VRU. Permit No. 2012-094-TV allowed the VRU to be replaced by a control device with efficiency greater than or equal to 95%. Two enclosed flares (F-2 and F-3) replaced the VRU and currently control all storage tank emissions. The flare system will combust 98% of collected vapors and satisfies the control requirements of 252:100-37-37.

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 252:100-33	Nitrogen Dioxides	Not in source category
OAC 252:100-35	Carbon Monoxide	Not type of emission unit
OAC 252:100-39	Nonattainment Areas	Not in area category

SECTION 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 [Subparts JJJJ and OOOO are Applicable]
Subpart K, Ka, Kb, VOL Storage Vessels. All of the tanks at the site are not subject because they were constructed prior to the effective dates of these standards and are smaller than the de minimis size (19,813 gallons).

Subpart GG, Stationary Gas Turbines. There are no turbines at the facility.
Subpart VV, Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. This facility is not a SOCMI plant.
Subpart KKK, Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. The facility does not engage in natural gas processing.
Subpart LLL, Onshore Natural Gas Processing: SO_2 Emissions. There is no natural gas sweetening operation at this site.
Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines (SI ICE), promulgates emission standards for all new SI engines ordered after June 12, 2006, and all SI engines modified or reconstructed after June 12, 2006, regardless of size. The specific emission standards (either in g/hp-hr or as a concentration limit) vary based on engine class, engine power rating, lean-burn or rich-burn, fuel type, duty (emergency or non-emergency), and numerous manufacture dates. Engine manufacturers are required to certify certain engines to meet the emission standards and may voluntarily certify other engines. An initial notification is required only for owners and operators of engines greater than 500 HP that are non-certified. Emergency engines will be required to be equipped with a non-resettable hour meter and are limited to 100 hours per year of operation excluding use in an emergency (the length of operation and the reason the engine was in operation must be recorded). All engines at this facility were ordered after June 12, 2006. ENG-1, ENG-5 to ENG-9, and ENG-12 were manufactured after July 1, 2010, and are subject to this subpart. ENG-2 to ENG-4, ENG-10, and ENG-11 were manufactured after June 12, 2006, and prior to July 1, 2008, and are subject to this subpart; however, there are currently no requirements under this subpart for GAP engines. Operating and maintenance requirements are enumerated in the Specific Conditions.

Subpart OOOO, 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 subpart affects the following sources:

1) Each gas well affected facility, which is a single natural gas well.
2) Each centrifugal compressor affected facility, which is a single centrifugal compressor using wet seals that is located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment.
3) Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment.
4) Each pneumatic controller affected facility, which is:
    a. For the oil production segment (between the wellhead and the point of custody transfer to an oil pipeline): a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 SCFH.
    b. For the natural gas production segment (between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not including natural gas processing plants): a single continuous bleed natural gas-driven pneumatic controller operating at a natural gas bleed rate greater than 6 SCFH.
    c. For natural gas processing plants: a single continuous bleed natural gas-driven pneumatic controller.
5) Each storage vessel affected facility, which is a single storage vessel located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission

and storage segment, that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water and has the potential for VOC emissions equal to or greater than 6 TPY.

6) The group of all equipment, except compressors, within a process unit located at an onshore natural gas processing plant is an affected facility.
7) Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.

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

For each new reciprocating compressor the owner/operator must replace the rod packing before 26,000 hours of operation or prior to 36 months. If utilizing the number of hours, the hours of operation must be continuously monitored. Commenced construction is based on the date of installation of the compressor (excluding relocation) at the facility. All units installed after August 23, 2011, are applicable.

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

Storage vessels constructed, modified, or reconstructed after August 23, 2011**,** and on or before September 18, 2015, with VOC emissions equal to or greater than 6 TPY must reduce VOC emissions by 95.0% or greater. The produced water tank (TK-3) and rainwater tanks (TK-8 and TK-9) were manufactured after August 23, 2011; however, uncontrolled potential emissions are less than 6 TPY per tank. The condensate tanks (TK-1, TK-2, TK-5, TK-6, and TK-7) were also manufactured after August 23, 2011, but controlled emissions are less than 6 TPY per tank. Since the total controlled emissions from all condensate and produced water tanks are less than 6 TPY, individual tank throughput limits are not needed. This permit limits the total emissions from all condensate and produced water storage vessels to less than 6 TPY after enforceable limits. Therefore, the tanks are not subject to this subpart.

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

A sweetening unit means a process device that removes hydrogen sulfide and/or carbon dioxide from the sour natural gas stream. A sour natural gas stream is defined as containing greater than or equal to 0.25 grains sulfur per 100 standard cubic feet or 4 ppmv. There is no amine unit at the facility.

Subpart OOOOa, Standards of Performance for Crude Oil and Natural Gas Facilities for which construction, modification, or reconstruction commenced after September 18, 2015. This subpart establishes emission standards and compliance schedules for the control of VOC and SO_2 emissions from affected facilities in the crude oil and natural gas source category.

There are no gas wells at this facility, there are no natural gas-driven pneumatic controllers operating at a natural gas bleed rate greater than 6 SCFH at this facility, this facility is not a gas plant, and there are no sweetening units at this facility. All storage tanks and 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.

National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 61 [Not Applicable]

There are no emissions of any of the regulated pollutants: arsenic, asbestos, beryllium, benzene, coke oven emissions, mercury, radionuclides or vinyl chloride except for trace amounts of benzene. Subpart J, 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. The final rule for area sources was promulgated on January 3, 2007. This final 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 100 MMSCFD and emits 0.80 TPY of benzene. The facility is therefore not subject to the control requirements of Subpart HH. However, the facility must maintain records of the de minimis determination as required in § 63.774(d)(1). The applicable recordkeeping requirements have been incorporated into the permit.

Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE). 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 4SLB engines with a site rating greater than or equal to 250 HP and less than or equal to 500 HP located at a major source) must meet the requirements of Subpart ZZZZ by complying with either 40 CFR Part 60 Subpart IIII (for CI engines) or 40 CFR Part 60 Subpart JJJJ (for SI engines). Owners and operators of new or reconstructed 4SLB engines with a site rating greater than or equal to 250 HP and less than or equal to 500 HP located at a major source are subject to the same MACT standards previously established for 4SLB engines above 500 HP at a major source, and must also meet the requirements of 40 CFR Part 60 Subpart JJJJ, except for the emissions standards for CO.

All engines are at this facility 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.

Compliance Assurance Monitoring (CAM), 40 CFR Part 64 [Applicable]

Compliance Assurance Monitoring, as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit at a major source that is required to obtain a Title V permit, if it meets all of the following criteria:

- It is subject to an emission limit or standard for an applicable regulated air pollutant
- It uses a control device to achieve compliance with the applicable emission limit or standard
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant greater than major source levels.

All engines on-site are equipped with an emission control device (oxidation catalyst), and the storage tanks 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.

The still vents of the glycol dehydration units (DEHY-1 and DEHY-2) are controlled by a condenser and an enclosed flare, and each unit produces pre-control BTEX and VOC emissions above the major source thresholds. Therefore, DEHY-1 and DEHY-2 are subject to CAM. For emissions estimation purposes, the condenser outlet temperature was conservatively assumed to be 120˚F. Therefore, routine temperature monitoring for the condenser is not necessary to ensure compliance with current permit limits. Additionally, the amine units do rely on the condensers to comply with permit limits as this is accomplished by utilization of the flares. Specifications for CAM-affected units are incorporated in the permit.

Myer Mountain CAM Plan for Flare F-1

The flare (F-1) at the Myer Mountain Compressor Station is subject to the CAM requirements [40 CFR Part 64] and shall comply with the terms of the following CAM Plan.

1. Background

    a. Emissions Unit
        i. Description: Flare F-1 is a 1 MMBtu/hr flare that controls the still vent emissions from the two (2) 50-MMSCFD dehydration units (DEHY-1 and DEHY-2) with a VOC and HAP combustion efficiency of at least 98%.
        ii. EU ID: F-1
        iii. Facility: Compressor Station in Pittsburg County, Oklahoma
    b. Applicable Requirement, Emission Limits, and Monitoring Requirements
        i. Requirement: AQD Permit No. 2019-0103-TVR
        ii. Emission limits: VOC = 3.34 TPY (both dehydration units combined)

    Monitoring requirements: Presence of a pilot flame prior to and during the operation of one or both dehydration units. Inspection and preventative maintenance.

    c. Control Technology: Flare

2. Monitoring Approach

    a. The dehy flare F-1 will have a pilot flame prior to and during operation of either DEHY-1 or DEHY-2.
        i. The indicator range is a discrete reading of “on,” which signals the flame is present.

b. The pilot flame sensor will be tested annually to ensure that the sensor is functioning properly.
c. The status of the pilot flame will be monitored daily when operating using the SCADA system. This system will monitor the pilot and alarm if a failure is detected.
d. Records will be maintained for outages or failures of the flare system while the respective dehydration unit is in operation.
e. Inspections and preventative maintenance will be performed regularly on the flare and dehydration units.
f. Records of the completed inspections and maintenance will be maintained.

3. Response to Excursion

An excursion from detecting the presence of a pilot will trigger an inspection, corrective action, and recordkeeping. Maintenance personnel will inspect the flare and pilot within 24 hours of receiving notification of an outage and make needed repairs as soon as practicable. Operations will return to normal upon completing the corrective actions.

Myer Mountain CAM Plan for DEHY-1 & DEHY-2 Condensers

The condensers on the dehydrators (DEHY-1 & DEHY-2) at the Myer Mountain Compressor Station are subject to the CAM requirements [40 CFR Part 64] and shall comply with the terms of the following CAM Plan.

1. Background

a. Emissions Unit
   i. Description: Condensers on the two (2) 50-MMSCFD dehydration units (DEHY-1 and DEHY-2) providing VOC and HAP controls.
   ii. EU ID: DEHY-1 and DEHY-2
   iii. Facility: Compressor Station in Pittsburg County, Oklahoma
b. Applicable Requirement, Emission Limits, and Monitoring Requirements
   i. Requirement: AQD Permit No. 2019-0103-TVR
   ii. Emission limits: VOC = 3.34 TPY (both dehydration units combined)

Monitoring requirements: That the condenser on each unit is operating during the operation of the corresponding dehydration unit. Inspection and preventative maintenance.

c. Control Technology: Condenser is used to condense and remove the vapors from the still vent.

2. Monitoring Approach

a. The condenser on each unit will be operating during operation of either DEHY-1 or DEHY-2.

i. The indicator range is a discrete reading of "on", which signals that the condenser is operating.

b. The status of each condenser will be monitored daily when operating the associated dehydration unit using the SCADA system. This system will alarm if a failure is detected.
c. Records will be maintained for outages or failures of the condenser system while the respective dehydration unit is in operation.
d. Inspections and preventative maintenance will be performed regularly on the condensers and dehydration units.
e. Records will be maintained of the completed inspections and maintenance.

3. Response to Excursion

An excursion from detecting the operation of the condenser will trigger an inspection, corrective action, and recordkeeping. Maintenance personnel will inspect the condenser within 24 hours of receiving notification of an outage and make needed repairs as soon as practicable. Operations will return to normal upon completing the corrective actions.

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

Stratospheric Ozone Protection, 40 CFR Part 82 [Not Applicable]
These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).
Subpart A identifies ozone-depleting substances and divides them into two classes. Class I controlled substances are divided into seven groups; the chemicals typically used by the manufacturing industry include carbon tetrachloride (Class I, Group IV) and methyl chloroform (Class I, Group V). A complete phase-out of production of Class I substances is required by January 1, 2000 (January 1, 2002, for methyl chloroform). Class II chemicals, which are hydrochlorofluorocarbons (HCFCs), are generally seen as interim substitutes for Class I CFCs. Class II substances consist of 33 HCFCs. A complete phase-out of Class II substances, scheduled in phases starting by 2002, is required by January 1, 2030. This facility does not utilize any Class I & II substances.
Subpart F requires that any persons servicing, maintaining, or repairing appliances except for motor vehicle air conditioners; persons disposing of appliances, including motor vehicle air conditioners; refrigerant reclaimers, appliance owners, and manufacturers of appliances and

recycling and recovery equipment comply with the standards for recycling and emissions reduction.

SECTION VIII. COMPLIANCE

Tier Classification and Public Review

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 is the sole owner of the land involved.

The applicant published the "Notice of Filing a Tier II Application" in the *McAlester News-Capital* newspaper, a local newspaper in Pittsburg County on January 24, 2019. The notice stated that the application was available for review at the McAlester Public Library in Pittsburg 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 http://www.deq.ok.gov.

Public Review

The applicant will be required to publish a "Notice of Tier II Draft Permit." On publication of this notice, the 30-day public review period will start. The draft permit will also be available for public review on the Air Quality section of the DEQ web page at http://www.deq.ok.gov.

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 by EPA Region 6. If the Administrator does not object in writing during the 45-day EPA review period, any person that meets the requirements of this subsection may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection. Any such petition shall be based only on objections to the permit that the petitioner raised with reasonable specificity during the public comment period provided for in 27A O.S. § 2-14-302.A.2., unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period. If the Administrator objects to the permit as a result of a petition filed under this subsection, the DEQ shall not issue the permit until EPA's objection has been resolved, except that a petition for review does not stay the effectiveness of a permit or its requirements if the permit was issued after the end of the 45-day review period and prior to an EPA objection. If the DEQ has issued a permit prior to receipt of an EPA objection under this subsection, the DEQ will modify, terminate, or revoke such permit, and shall do so consistent with the procedures in 40 CFR §§ 70.7(g)(4) or (5)(i) and (ii) except in unusual circumstances. If the DEQ revokes the permit, it may thereafter issue only a revised permit that satisfies EPA's objection. In

any case, the source will not be in violation of the requirement to have submitted a timely and complete application.

Inspection

A Full Compliance Evaluation inspection was conducted on September 25, 2019. Alicia Foster (Environmental Programs Specialist) conducted the evaluation for the Air Quality Division of the Oklahoma Department of Environmental Quality. Susanne Coolbroth (Environmental Coordinator) 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 ENG-1, ENG-5, ENG-6 to ENG-9, and ENG-12 were submitted. Additionally, the results of quarterly Portable Emission Analyzer (PEA) tests were provided for all engines. The engine test results show compliance with the applicable emission limitations.

NSPS Subpart JJJJ Testing Results for Compressor Engines

EU ID	Date	Percent Load %	NO_X		CO		VOC	
			Test Results (g/hp-hr)	JJJJ Standards (g/hp-hr)	Test Results (g/hp-hr)	JJJJ Standards (g/hp-hr)	Test Results (g/hp-hr)	JJJJ Standards (g/hp-hr)
ENG-1	10/15/2019	90.1	0.43	1.00	0.09	2.00	0.07	0.70
ENG-5	02/07/2019	96.5	0.47	1.00	0.06	2.00	0.21	0.70
ENG-6	02/07/2019	95.0	0.35	1.00	0.06	2.00	0.10	0.70
ENG-7	02/05/2019	96.3	0.35	1.00	0.22	2.00	0.22	0.70
ENG-8	10/15/2019	94.5	0.39	1.00	0.06	2.00	0.14	0.70
ENG-9	10/15/2019	91.8	0.46	1.00	0.39	2.00	0.14	0.70
ENG-12	10/15/2019	99.9	0.42	1.00	0.06	2.00	0.07	0.70

Quarterly PEA Engine Emission Testing

EU ID	Test Date	NO_x		CO	
		Test (lb/hr)	Limit (lb/hr)	Test (lb/hr)	Limit (lb/hr)
ENG-1	10/16/2019	0.585	1.52	0.309	1.81
ENG-2	12/10/2019	3.480	4.43	0.662	1.17
ENG-3	12/12/2019	3.395	4.43	0.198	1.17
ENG-4	10/22/2019	3.963	4.43	0.139	1.17
ENG-5	10/22/2019	0.918	2.61	0.358	3.01
ENG-6	10/22/2019	1.045	2.61	0.269	3.01
ENG-7	10/22/2019	0.589	2.61	0.871	3.01
ENG-8	10/16/2019	0.692	1.52	0.161	1.81
ENG-9	10/16/2019	0.648	1.52	1.260	1.81
ENG-10	12/10/2019	3.912	4.43	0.152	1.17
ENG-11	12/10/2019	4.409	4.43	0.559	1.17
ENG-12	10/16/2019	0.199	1.52	0.393	1.81

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. 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 **Permit Number 2019-0103-TVR**
Myer Mountain Compressor Station

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on January 24, 2019. The Evaluation Memorandum dated June 24, 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

EU ID	Serial No.	Source	NO_X		CO		VOC(1)	
			lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
ENG-1	JEF01733	Caterpillar 3516B(2)	1.52	6.70	1.81	7.90	1.70	7.44
ENG-2	WPW00618	Caterpillar 3516(2)	4.43	19.40	1.17	5.10	0.67	2.93
ENG-3	WPW00275	Caterpillar 3516(2)	4.43	19.40	1.17	5.10	0.67	2.93
ENG-4	WPW00604	Caterpillar 3516(2)	4.43	19.40	1.17	5.10	0.67	2.93
ENG-5	BEN00803	Caterpillar 3608(2)	2.61	11.40	3.01	13.20	3.67	16.05
ENG-6	BEN00804	Caterpillar 3608(2)	2.61	11.40	3.01	13.20	3.67	16.05
ENG-7	BEN00805	Caterpillar 3608(2)	2.61	11.40	3.01	13.20	3.67	16.05
ENG-8	JEF01723	Caterpillar 3516B(2)	1.52	6.70	1.81	7.90	1.70	7.44
ENG-9	JEF01730	Caterpillar 3516B(2)	1.52	6.70	1.81	7.90	1.70	7.44
ENG-10	WPW01663	Caterpillar 3516(2)	4.43	19.4	1.17	5.10	0.67	2.93
ENG-11	WPW00407	Caterpillar 3516(2)	4.43	19.4	1.17	5.10	0.67	2.93
ENG-12	JEF01204	Caterpillar 3516B(2)	1.52	6.70	1.81	7.90	1.70	7.44

(1) Includes H_2CO.
(2) Equipped with oxidation catalyst (OC).

a. All engines shall be operated with exhaust gases passing through functional oxidation catalysts.

b. Each engine at the facility shall have a readily accessible, permanent identification plate attached, which shows the make, model number, and serial number.

c. At least once per calendar quarter, the permittee shall conduct tests of NOx and CO emissions from the engine(s) 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 semiannual or annual, and may be used in lieu of testing required by this permit for an applicable reporting period, i.e., quarter, six-month, or annual period coinciding with issuance of this permit. Reduced testing frequency does not apply to engines with catalytic converters/oxidation catalysts. Any reduction in the testing frequency shall be noted in the next required semiannual monitoring and deviation report. [OAC 252:100-8-6 (a)(3)(A)]

d. 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.

e. 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)]

1. 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.
2. The authorization of replacement of an engine or turbine includes temporary periods of 6 months or less for maintenance purposes.
3. 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.
4. Quarterly emissions tests for the replacement engine(s)/turbine(s) shall be conducted to confirm continued compliance with NO_X and CO emission limitations. A copy of the first quarter testing shall be provided to AQD within 60 days of start-up of each replacement engine/turbine. The test report shall include the engine/turbine fuel usage, stack flow (ACFM), stack temperature (°F), and pollutant emission rates (g/hp-hr, lbs/hr, and TPY) at maximum rated horsepower for the altitude/location.
5. Replacement equipment and emissions are limited to equipment and emissions which are not a modification under NSPS or NESHAP.
6. 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.

7. 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.
8. 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.

EUG 2 Tanks

EU ID	Source	Rating	Install Date	VOC (TPY)	
				Emitted at the Tanks	Emitted at the Flares
TK-1	Condensate	400 bbl	2012	2.20	3.30
TK-2	Condensate	400 bbl	2012		
TK-3	Condensate/ Produced Water	400 bbl	2012		
TK-5	Condensate	400 bbl	2012		
TK-6	Condensate	400 bbl	2012		
TK-7	Condensate	400 bbl	2012		
TK-4	Gunbarrel	500 bbl	2012		
TK-8	Rainwater	210 bbl	2013	-	-
TK-9	Rainwater	210 bbl	2013	-	-

a. Emissions from condensate tanks TK-1, 2, 5, 6, and 7; the condensate/produced water tank TK-3; and the gunbarrel tank TK-4 shall be controlled by enclosed flares (F-2 and F-3), which shall not be replaced except by a device of equal or greater efficiency (95%).
b. Some of the produced water throughput may be sent to the condensate tanks as part of an alternate operating scenario.
c. 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. 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.

EUG 3 Loading

Unit ID	Source	VOC (TPY)
CLOAD-1	Condensate Loading	6.88
WLOAD-1	Produced Water Loading	0.07

Throughput of condensate shall not exceed 2,140,000 gallons per year. Throughput of produced water shall not exceed 2,140,000 gallons per year.

EUG 4 Glycol Dehydrators

Unit ID	Source	VOC (TPY)
DEHY-1	50-MMSCFD Dehydrator	3.34
DEHY-2	50-MMSCFD Dehydrator	

a. 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.
   1. All off-gases from the dehydration units' still vents shall be processed by a flare or an equivalent control device (98% or greater efficiency) for VOC and HAP emissions control.
   2. All emissions from the flash tanks shall be routed to the inlet separator (recirculated).
   3. The natural gas throughput of each glycol dehydration unit shall not exceed 50 MMSCFD, monthly average.
   4. The lean glycol circulation rate at each unit shall not exceed 9.63 gallons per minute.
   5. The lean glycol circulation rate 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 _____

   6. As an alternative to (5), the manufacturer's rating, visible on the pump, or performance data for the model of pump that verifies the maximum pump rate at any operational conditions shall be maintained and available for inspection.

b. 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.
c. The glycol dehydration units are subject to CAM (40 CFR Part 64) and shall follow the prepared CAM Plan.

Criterion	Non-Assist Flares	Condensers
Indicator	Presence of flare pilot flame(s)	A discrete reading of "on", which signals the condenser is operating
Measurement Approach	Presence of flare pilot flame(s) shall be monitored continuously using a thermocouple or equivalent device capable of detecting that the flare pilot flame(s) is/are present	Inspections and preventative maintenance

Criterion	Non-Assist Flares	Condensers
Indicator Range	An excursion is defined as the absence of a flare pilot flame when gases are routed to the flare. Excursions trigger logging and reporting in semiannual monitoring report.	An excursion is defined as an outage or failure of the condenser system while the respective dehydration unit is in operation
QIP Threshold	Any excursion triggers verification of calibration and possible inspection/replacement of sensor.	Any excursion triggers an inspection, corrective action, and recordkeeping. Maintenance personnel will inspect the condenser within 24 hours of receiving notification of an outage and make needed repairs as soon as practicable.
Performance Criteria		
Data Representativeness	The flare pilot flame(s) sensor shall be an integral part of the flare and shall be located such that the presence of the flare pilot flame(s) can be detected.	Inspections are performed on the condenser system.
QA/QC Practices and Criteria	Annual verification of calibration or replacement of flare pilot flame(s) sensor. The verification shall ensure that the sensor is operating within manufacturer specifications.	Qualified personnel perform inspections.
Monitoring Frequency	The presence of a flare pilot flame(s) shall be monitored continuously.	The status of each condenser will be monitored daily when operating the associated dehydration unit using the SCADA system. This system will alarm if a failure is detected.
Data Collection Procedure	Absence of the flare pilot flame(s) shall be recorded.	Records will be maintained for outages or failures of the condenser system while the respective dehydration unit is in operation. Records will be maintained of the completed inspections and maintenance.
Averaging Period	No averaging.	N/A

EUG 5 Combustion Equipment (Reboilers)

The 1.0-MMBTUH reboilers are small sources that qualify as insignificant activities, do not have emission limits, and are not restricted to the equipment as it exists.

EUG 6 Fugitives

Emissions from fugitive equipment leaks are insignificant, do not have emission limits, and the facility is not limited to the equipment as it exists.

Component	Estimated Number of Items
Gas/vapor valves	180
Light oil valves	75
Water/light oil valves	75
Gas/vapor flanges/connectors	180
Light oil flanges/connectors	75
Water/light oil flanges/connectors	75
Compressor seals	12
Open-ended lines	12
Light oil pumps	12
Water/light oil pumps	12
TOTAL	**708**

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

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 every calendar year by a current gas company bill, lab analysis, stain-tube analysis, gas contract, tariff sheet, or other approved method, updated once per calendar year. [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. 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]
   a. §60.4230 Am I subject?
   b. §60.4233 Emissions standards
   c. §60.4234 How long must I meet emission standards?
   d. §60.4243 Compliance requirements
   e. §60.4244 Test methods and procedures
   f. §60.4245 Notification, reporting and recordkeeping

6. All engines at the compressor station are affected facilities under NESHAP Subpart ZZZZ and shall comply with all sections including, but not necessarily restricted to, the following.
[40 CFR Part 63 Subpart ZZZZ]

   a. §63.6580, 6585, 6590 Applicability.
   b. §63.6595 When do I have to comply with this subpart?
   c. §63.6600, 6601,6605 What emission limitations and operating limitations apply?
   d. §63.6610, 6611, 6615, 6620 Performance tests and procedures.
   e. §63.6625 What are my monitoring, installation, operation, and maintenance requirements?
   f. §63.6630, 6635, 6640 Demonstrating initial and continuous compliance with emission and operating limitations.
   g. §63.6645, 6650, 6655, 6660 Notifications, reporting, and recordkeeping
   h. §63.6665 What parts of the General Provisions apply to me?
   i. §63.6670 Who implements and enforces this subpart?
   j. §63.6675 What definitions apply to this subpart?

7. Records of capacity and materials stored in tanks smaller than 10,000 gallons shall be maintained on-site to verify Insignificant Activities. Records of calculations demonstrating that emissions due to startup, shutdown, and maintenance, such as venting or blowdowns, total less than 5 TPY of VOC shall be maintained. No recordkeeping is required for those operations that qualify as Trivial Activities. [OAC 252:100-8-6 (a)(3)(B)]

8. Equipment at the facility subject to NSPS Subpart OOOO shall comply with applicable requirements: [40 CFR Part 60 Subpart OOOO]

a. § 60.5360 What is the purpose of this subpart?
b. § 60.5365 Am I subject to this subpart?
c. § 60.5370 When must I comply with this subpart?
d. § 60.5375 What standards apply to gas well affected facilities?
e. § 60.5380 What standards apply to centrifugal compressor affected facilities?
f. § 60.5385 What standards apply to reciprocating compressor affected facilities?
g. § 60.5390 What standards apply to pneumatic controller affected facilities?
h. § 60.5395 What standards apply to storage vessel affected facilities?
i. § 60.5400 What equipment leak standards apply to affected facilities at an onshore natural gas processing plant?
j. § 60.5401 What are the exceptions to the equipment leak standards for affected facilities at onshore natural gas processing plants?
k. § 60.5402 What are the alternative emission limitations for equipment leaks from onshore natural gas processing plants?
l. § 60.5405 What standards apply to sweetening units at onshore natural gas processing plants?
m. § 60.5406 What test methods and procedures must I use for my sweetening units affected facilities at onshore natural gas processing plants?
n. § 60.5407 What are the requirements for monitoring of emissions and operations from my sweetening unit affected facilities at onshore natural gas processing plants?
o. § 60.5408 What is an optional procedure for measuring hydrogen sulfide in acid gas-Tutwiler Procedure?
p. § 60.5410 How do I demonstrate initial compliance with the standards for my gas well affected facility, my centrifugal compressor affected facility, my reciprocating compressor affected facility, my pneumatic controller affected facility, my storage vessel affected facility, and my equipment leaks and sweetening unit affected facilities at onshore natural gas processing plants?
q. § 60.5411 What additional requirements must I meet to determine initial compliance for my closed vent systems routing emissions from storage vessels or centrifugal compressor wet seal fluid degassing systems?
r. § 60.5412 What additional requirements must I meet for determining initial compliance with control devices used to comply with the emission standards for my storage vessel or centrifugal compressor affected facility?
s. § 60.5413 What are the performance testing procedures for control devices used to demonstrate compliance at my storage vessel or centrifugal compressor affected facility?
t. § 60.5415 How do I demonstrate continuous compliance with the standards for my gas well affected facility, my centrifugal compressor affected facility, my stationary reciprocating compressor affected facility, my pneumatic controller affected facility, my storage vessel affected facility, and my affected facilities at onshore natural gas processing plants?
u. § 60.5416 What are the initial and continuous cover and closed vent system inspection and monitoring requirements for my storage vessel or centrifugal compressor affected facility?
v. § 60.5417 What are the continuous control device monitoring requirements for my storage vessel or centrifugal compressor affected facility?
w. § 60.5420 What are my notification, reporting, and recordkeeping requirements?

x. § 60.5421 What are my additional recordkeeping requirements for my affected facility subject to VOC requirements for onshore natural gas processing plants?
y. § 60.5422 What are my additional reporting requirements for my affected facility subject to VOC requirements for onshore natural gas processing plants?
z. § 60.5423 What additional recordkeeping and reporting requirements apply to my sweetening unit affected facilities at onshore natural gas processing plants?
aa. § 60.5425 What parts of the General Provisions apply to me?
bb. § 60.5430 What definitions apply to this subpart?

9. 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_X and CO exhaust from the engines.
b. Hours of operation for any quarter in which testing is not conducted.
c. For the fuel(s) burned, the appropriate document(s) as described in Specific Condition No. 2.
d. Records required demonstrating compliance with NSPS Subparts JJJJ and OOOO and NESHAP Subpart ZZZZ.
e. Records of pilot flame(s) outages.
f. Dehydrator records, including natural gas throughputs (monthly and 12-month rolling totals), glycol circulation rates (monthly), and records required by 40 CFR Part 63, Subpart HH, all per Specific Condition 1, EUG 4.
g. Records of condensate and produced water throughput and emission calculations demonstrating compliance with Specific Condition 1, EUG 2 and EUG 3 (monthly, 12-month rolling total).

10. No later than 30 days after each anniversary date of the issuance of the original Title V operating permit, 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)]

11. This permit replaces and supersedes all previous air quality operating permits for this facility, which are now cancelled.

DRAFT/PROPOSED

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. 2019-0103-TVR

MarkWest Oklahoma Gas Company, LLC,

having complied with the requirements of the law, is hereby granted permission to operate the Myer Mountain Compressor Station located in Section 23, Township 7N, Range 12E, Pittsburg 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 below, except as authorized under Section VIII of the Standard Conditions.

Division Director, Air Quality Division **Date**

SCOTT A. THOMPSON
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

KEVIN STITT
Governor

MarkWest Oklahoma Gas Company, LLC
Attn.: Ms. Susanne Coolbroth
1515 Arapahoe Street, Tower 1, Suite 1600
Denver, CO 80202

Subject: Operating Permit No. **2019-0103-TVR**
Myer Mountain Compressor Station
AQD Facility ID: 8704
Section 23, Township 7N, Range 12E, Pittsburg County, OK

Dear Ms. Coolbroth:

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

Enclosure

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.

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

DEQ NOTICE OF TIER *…II or III…* **DRAFT PERMIT**

A Tier *…II or III…* **application for an air quality** *…type of permit or permit action being sought (e.g., Construction Permit for a Major Facility)…* **has been filed with the Oklahoma Department of Environmental Quality (DEQ) by applicant,** *…name and address.*

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

In response to the application, DEQ has prepared a draft permit [modification] (Permit Number: *…xx-xxx-x…***), which may be reviewed at** *…locations (one must be in the county where the site/facility is located)…* **or at the Air Quality Division's main office (see address below). The draft permit is also available for review in the Air Quality Section of DEQ's Web Page: http://www.deq.ok.gov/**

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

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

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

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

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

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

ACFM	Actual Cubic Feet per Minute
AD	Applicability Determination
AFRC	Air-to-Fuel Ratio Controller
API	American Petroleum Institute
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BAE	Baseline Actual Emissions
BHP	Brake Horsepower (bhp)
BTU	British thermal unit (Btu)
C&E	Compliance and Enforcement
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstract Service
CAAA	Clean Air Act Amendments
CC	Catalytic Converter
CCR	Continuous Catalyst Regeneration
CD	Consent Decree
CEM	Continuous Emission Monitor
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
CI	Compression Ignition
CNG	Compressed Natural Gas
CO	Carbon Monoxide or Consent Order
COA	Capable of Accommodating
COM	Continuous Opacity Monitor
D	Day
DEF	Diesel Exhaust Fluid
DG	Demand Growth
DSCF	Dry Standard (At Standard Conditions) Cubic Foot (Feet)
EGU	Electric Generating Unit
EI	Emissions Inventory
EPA	Environmental Protection Agency
ESP	Electrostatic Precipitator
EUG	Emissions Unit Group
EUSGU	Electric Utility Steam Generating Unit
FCE	Full Compliance Evaluation
FCCU	Fluid Catalytic Cracking Unit
FIP	Federal Implementation Plan
FR	Federal Register
GACT	Generally Achievable Control Technology
GAL	Gallon (gal)
GDF	Gasoline Dispensing Facility
GEP	Good Engineering Practice
GHG	Greenhouse Gases
GR	Grain(s) (gr)
H_2CO	Formaldehyde
H_2S	Hydrogen Sulfide
HAP	Hazardous Air Pollutants
HC	Hydrocarbon
HCFC	Hydrochlorofluorocarbon
HFR	Horizontal Fixed Roof
HON	Hazardous Organic NESHAP
HP	Horsepower (hp)
HR	Hour (hr)
I&M	Inspection and Maintenance
IBR	Incorporation by Reference
ICE	Internal Combustion Engine
LAER	Lowest Achievable Emission Rate
LB	Pound(s) [Mass] (lb, lbs, lbm)
LB/HR	Pound(s) per Hour (lb/hr)
LDAR	Leak Detection and Repair
LNG	Liquefied Natural Gas
LT	Long Ton(s) (metric)
M	Thousand (Roman Numeral)
MAAC	Maximum Acceptable Ambient Concentration
MACT	Maximum Achievable Control Technology
MM	Prefix used for Million (Thousand-Thousand)
MMBTU	Million British Thermal Units (MMBtu)
MMBTUH	Million British Thermal Units per Hour (MMBtu/hr)
MMSCF	Million Standard Cubic Feet (MMscf)
MMSCFD	Million Standard Cubic Feet per Day
MSDS	Material Safety Data Sheet
MWC	Municipal Waste Combustor
MWe	Megawatt Electrical
NA	Nonattainment
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NH_3	Ammonia
NMHC	Non-methane Hydrocarbon
NGL	Natural Gas Liquids
NO_2	Nitrogen Dioxide
NOx	Nitrogen Oxides
NOI	Notice of Intent
NSCR	Non-Selective Catalytic Reduction
NSPS	New Source Performance Standards
NSR	New Source Review

O_3	Ozone
O&G	Oil and Gas
O&M	Operation and Maintenance
O&NG	Oil and Natural Gas
OAC	Oklahoma Administrative Code
OC	Oxidation Catalyst
PAH	Polycyclic Aromatic Hydrocarbons
PAE	Projected Actual Emissions
PAL	Plant-wide Applicability Limit
Pb	Lead
PBR	Permit by Rule
PCB	Polychlorinated Biphenyls
PCE	Partial Compliance Evaluation
PEA	Portable Emissions Analyzer
PFAS	Per- and Polyfluoroalkyl Substance
PM	Particulate Matter
$PM_{2.5}$	Particulate Matter with an Aerodynamic Diameter <= 2.5 Micrometers
PM_{10}	Particulate Matter with an Aerodynamic Diameter <= 10 Micrometers
POM	Particulate Organic Matter or Polycyclic Organic Matter
ppb	Parts per Billion
ppm	Parts per Million
ppmv	Parts per Million Volume
ppmvd	Parts per Million Dry Volume
PSD	Prevention of Significant Deterioration
psi	Pounds per Square Inch
psia	Pounds per Square Inch Absolute
psig	Pounds per Square Inch Gage
RACT	Reasonably Available Control Technology
RATA	Relative Accuracy Test Audit
RAP	Regulated Air Pollutant
RFG	Refinery Fuel Gas
RICE	Reciprocating Internal Combustion Engine
RO	Responsible Official
ROAT	Regional Office at Tulsa
RVP	Reid Vapor Pressure
SCC	Source Classification Code
SCF	Standard Cubic Foot
SCFD	Standard Cubic Feet per Day
SCFM	Standard Cubic Feet per Minute
SCR	Selective Catalytic Reduction
SER	Significant Emission Rate
SI	Spark Ignition
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SNCR	Selective Non-Catalytic Reduction
SO_2	Sulfur Dioxide
SOx	Sulfur Oxides
SOP	Standard Operating Procedure
SRU	Sulfur Recovery Unit
T	Tons
TAC	Toxic Air Contaminant
THC	Total Hydrocarbons
TPY	Tons per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulates
TV	Title V of the Federal Clean Air Act
$\mu g/m^3$	Micrograms per Cubic Meter
US EPA	U. S. Environmental Protection Agency
VFR	Vertical Fixed Roof
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
VOL	Volatile Organic Liquid
VRT	Vapor Recovery Tower
VRU	Vapor Recovery Unit
YR	Year
2SLB	2-Stroke Lean Burn
4SLB	4-Stroke Lean Burn
4SRB	4-Stroke Rich Burn

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_{10}). 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 air-tight 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]