

**OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

MEMORANDUM

June 15, 2020

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

THROUGH: Rick Groshong, Environmental Manager, Compliance and Enforcement

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

THROUGH: David Schutz, P.E., New Source Permit Section

FROM: Ge Li, P.E., Engineering Section

SUBJECT: Evaluation of Permit Application No. **2014-2368-C (M-2)**
Rose Rock Midstream, LP
Cushing North Tank Farm (SIC 4612/NAICS 486110)
Facility ID: 7238
Latitude 36.01604°N, Longitude 96.75876°W
Section 22, Township 18N, Range 5E, Payne County, OK
Directions: From the intersection of Hwy 33 and Hwy 18, go north 2.3 miles on Hwy 18, facility is on the east side of Hwy 18.

SECTION I. INTRODUCTION

Rose Rock Midstream, LP (Rose Rock or applicant) has requested a construction permit for a modification to the reference facility. The facility is currently operating under Permit No. 2014-2368-TVR (M-1) issued on May 22, 2017. The facility is a major source for Prevention of Significant Deterioration (PSD) and an “area” source of Hazardous Air Pollutants (HAPs). The modifications include:

- Adding roof landing events to accommodate 10-year DOT inspections, and providing a PSD netting analysis for existing tanks;
- Updating the emission factors for fugitive emissions to the Marketing Terminal Average Emission Factors (EPA-453/R-95-017 Table 2-3), instead of Oil and Gas Production Operations (Table 2-4);
- Adding one (1) additional 30-hp propane-fired emergency generator. Rose Rock requested to add three (3) 30-hp propane-fired emergency generators in permit application 2014-2368-TVR (M-2) to provide backup electrical power. The four emergency generators will be reviewed together in this permit action.

Currently, EUG 5, Roof Landing VOC emissions are estimated to be 12.99 TPY as evaluated in the memorandum of Permit No. **2014-2368-TVR (M-1)**, but do not have an emission limit in the Specific Conditions. Rose Rock proposed increasing the number of EUG 5 roof landing events from 12 events to 18 events in any 12 months period. This permit action also serves to resolve the

exceedance of the current permit limit on tank roof landings, documented in Rose Rock’s self-disclosure submitted to DEQ on April 2, 2019 (Enforcement ID: 9520). Based on a change in the material stored (from RVP 5 crude oil to RVP 7 crude oil), updated AP-42 (11/19) Chapter 7 emission factors, and 18 landing events, the emissions of EUG 5 will total 44.46 TPY VOC.

The proposal is considered a relaxation of underlying enforceable permit limitations of historical projects and has been determined to be **Tier II** based on the request for a change to a permit limit established to avoid PSD review.

SECTION II. PROCESS DESCRIPTION

The Rose Rock Cushing North Tank Farm (Facility) is a crude oil storage and transmission facility located in the town of Cushing, OK, in Payne County. This is an existing facility that is currently permitted for a variety of condensate/crude oil storage tanks, an unloading station, and the associated piping and equipment.

Condensate/crude oil is received by tank truck or via pipeline. If the liquid is received via tank truck, it is typically pumped into a smaller tank (i.e., 400-bbl fixed roof tank or 1,000-bbl internal floating roof tank) before it is transferred to one of the larger external floating roof (EFR) storage tanks. As required, the liquid is then transferred out of the facility via pipeline.

SECTION III. EQUIPMENT

The post-project equipment onsite is listed below. Emission units that were authorized in previous permits but never constructed have been removed.

EUG 2 – Fugitives			
EU ID	Point ID	Source	# Items
F1	F1	Pump seals – light oil	10
F2	F2	Valves – light oil	297
F3	F3	Flanges – light oil	964
F4	F4	Other	168
F5	F5	Loading boxes	6

EUG 3 – Storage Tanks					
EU ID	Point ID	Roof Type	Capacity (bbl)	Throughput (bbl/tank/yr)	Construction/Installation Date
T-1007	1007	EFR	100,000	9,200,000	2009
T-1009	1009	EFR	100,000	2,400,000	2011
T-1010	1010	EFR	100,000	2,400,000	2012
T-1011	1011	EFR	100,000	2,400,000	2012
T-1012	1012	EFR	100,000	2,400,000	2012
T-2522	2522	EFR	250,000	23,000,000	2009
T-2523	2523	EFR	250,000	23,000,000	2009
T-2524	2524	EFR	250,000	23,000,000	2009
T-2525	2525	EFR	250,000	23,000,000	2009

EUG 3 – Storage Tanks					
EU ID	Point ID	Roof Type	Capacity (bbl)	Throughput (bbl/tank/yr)	Construction/Installation Date
T-2526	2526	EFR	250,000	23,000,000	2011
T-2527	2527	EFR	250,000	23,000,000	2012
T-2528	2528	EFR	250,000	23,000,000	2012
T-2529	2529	EFR	250,000	23,000,000	2012
T-2530	2530	EFR	250,000	14,600,000	2009
T-2531	2531	EFR	250,000	23,000,000	2009
T-2532	2532	EFR	250,000	23,000,000	2009
T-2533	2533	EFR	250,000	23,000,000	2010
T-2534	2534	EFR	250,000	23,000,000	2011
T-2535	2535	EFR	250,000	6,000,000	2012
T-2536	2536	EFR	250,000	6,000,000	2012
T-2537	2537	EFR	250,000	6,000,000	2012
T-2538	2538	EFR	250,000	6,000,000	2011
T-2539	2539	EFR	250,000	6,000,000	2012
T-2540	2540	EFR	250,000	6,000,000	2012
T-2541	2541	EFR	250,000	6,000,000	2012
T-3501	3501	EFR	350,000	32,200,000	2009
T-3502	3502	EFR	350,000	32,200,000	2009
T-3503	3503	EFR	350,000	32,200,000	2009
T-3504	3504	EFR	350,000	32,200,000	2009
T-3505	3505	EFR	350,000	32,200,000	2009
T-3506	3506	EFR	350,000	32,200,000	2009

EUG 4 – Storage Tanks – Cone Roof					
EU ID	Point ID	Roof Type	Capacity (bbl)	Throughput (bbl/tank/yr)	Construction/Installation Date
T-403	403	Cone	400	200,000	2010
T-404	404	Cone	400	200,000	2010

Note: Storage tanks T-401 and T-402 were removed in Permit No. 2014-2368-TVR (M-1).

EUG 4A – Truck Unloading Tanks – IFR					
EU ID	Point ID	Roof Type	Capacity (bbl)	Throughput (bbl/tank/yr)	Construction/Installation Date
T-101	101	IFR	1,000	1,095,000	2015
T-102	102	IFR	1,000	1,095,000	2015

Note: Truck unloading tanks receive condensate/oil from delivery trucks after which the condensate/oil is transferred by pump to other larger storage tanks. Tanks T-103, T-104, T-105 and T-106 were never built. The applicant requested to lower the throughput limit to 1,095,000-bbl/yr via email correspondence on April 30, 2020.

Roof landings are being placed as a separate EUG from the tanks primarily for administrative convenience in tracking additional emissions from these events, rather than attempting to add emissions to individual tanks.

EUG 5 – Roof Landings				
EU ID	Tank Size (bbl)	Number of Tanks	Events Per Year	Construction / Installation Date
EUG-3 tanks	100K	5	2	See EUG-3
EUG-3 tanks	250K	20	13	
EUG-3 tanks	350K	6	2	
EUG-4A tanks	1K	2	1	See EUG-4A

EUG 6 - Emergency Generators					
EU	Make/Model	HP	Fuel	Manufacture Date	Installation Date
6-1	Generac Model 7042	30	Propane	Post 1/1/2009	TBD
6-2	Generac Model 7042	30		Post 1/1/2009	TBD
6-3	Generac Model 7042	30		Post 1/1/2009	TBD
6-4	Generac Model 7042	30		Post 1/1/2009	TBD

SECTION IV. EMISSIONS

- Fugitive VOC emission were revised using emission factors from EPA’s “Protocol for Equipment Leak Emission Estimates” (EPA-453/R-95-017), Table 2.3 – Marketing Terminal Emission Factors, an estimated number of actual fugitive components, and 100% C3+. Marketing terminal factors are more representative for this facility because it is continuously manned (i.e., daily inspections) and handles crude/condensate liquids at low pipeline pressures (less than 50 psia) only. The table below details fugitive emission estimates.

Post-Modification Fugitive Emissions

EU ID	Emission Factor (lb/hr/component)	# Items	VOC Emissions
			TPY
Pump Seals	0.001188	10	0.05
Valves	0.0000946	297	0.12
Flanges	0.0000176	964	0.07
Other (Packing seals, drip pans, sumps)	0.000286	168	0.21
Total			0.46
Pre-project Total			21.74
Difference			-21.28

- The only emissions of consequence from the storage tanks are VOCs and HAPs contained therein. Emissions estimates were based on the listed maximum throughput for each tank in EUG 3 and EUG 4, and the USEPA program “Tanks 4.09.” Rose Rock is in the transition of switching to AP-42 (11/19) Chapter 7 for future tank emissions calculations.

EUG 3			
EU ID	Throughput, bbl/yr	VOC Emissions	
		lb/hr	TPY
T-1007	9,200,000	---	2.05
T-1009	2,400,000	---	0.97
T-1010	2,400,000	---	0.97
T-1011	2,400,000	---	0.97
T-1012	2,400,000	---	0.97
T-2522	23,000,000	---	3.36
T-2523	23,000,000	---	3.36
T-2524	23,000,000	---	3.36
T-2525	23,000,000	---	3.36
T-2526	23,000,000	---	3.36
T-2527	23,000,000	---	3.36
T-2528	23,000,000	---	3.36
T-2529	23,000,000	---	3.36
T-2530	14,600,000	---	5.67
T-2531	23,000,000	---	3.36
T-2532	23,000,000	---	3.36
T-2533	23,000,000	---	3.36
T-2534	23,000,000	---	3.36
T-2535	6,000,000	---	3.21
T-2536	6,000,000	---	1.62
T-2537	6,000,000	---	1.62
T-2538	6,000,000	---	1.62
T-2539	6,000,000	---	1.62
T-2540	6,000,000	---	1.62
T-2541	6,000,000	---	1.62
T-3501	32,200,000	---	5.80
T-3502	32,200,000	---	5.80
T-3503	32,200,000	---	5.80
T-3504	32,200,000	---	5.80
T-3505	32,200,000	---	5.80
T-3506	32,200,000	---	5.80
Total		---	99.65

EUG 4			
EU ID	Throughput, bbl/yr	VOC Emissions	
		lb/hr	TPY
T-403	200,000	---	1.52
T-404	200,000	---	1.52
Total		---	3.04

For the truck unloading tanks in EUG 4A, the previously requested throughput of 3,942,000-bbl/yr was based on the maximum throughput of delivery truck outlet pumps (450 bbl/hr running 8,760 hr/year) and is not considered realistic. Rose Rock hereby requested a new throughput of 1,095,000-bbl/yr and updated TANKS 4.0.9d emission calculations with RVP 7.

EUG 4A			
EU ID	Throughput, bbl/yr	VOC Emissions	
		lb/hr	TPY
T-101	1,095,000	---	1.77
T-102	1,095,000	---	1.77
Total		---	3.54

- Roof landing loss emissions were based on equations obtained from AP-42 (11/19) Chapter 7 and crude oil of RVP 7. Tanks of different sizes were evaluated separately, and all landing emissions are limited under a cap of 44.5 TPY per applicant’s request (see Section V.5).

EUG 5 – Roof Landings					
EU ID	Tank Size (bbl)	Number of Tanks	Event Emissions (ton)	Events Per Year	Total Landing Emissions (TPY)
EUG-3 tanks	100K	5	1.03	2	2.05
EUG-3 tanks	250K	20	2.68	13	34.88
EUG-3 tanks	350K	6	3.76	2	7.51
EUG-4A tanks	1K	2	0.018	1	0.04
Total					44.48

- Emissions from the 30-hp Generac Model 7042 emergency generators were calculated based on 500 hours/yr total operation and emission factors based on EPA Tier 3, nonroad requirements (HC + NOx standard divided into separate NOx and VOC standards). Formaldehyde emission factor is obtained from AP-42 (7/00) Table 3.2-3.

Emergency Generator Emission Factors

EU ID	NO_x (g/hp-hr)	CO (g/hp-hr)	VOC (g/hp-hr)	CH₂O (lb/MMBtu)
6-1 thru 6-4	6.5	387	3.5	0.0205

Facility-wide Emissions

EUG	Description	NO _x	CO	VOC
		TPY	TPY	TPY
2	Fugitive Emissions	-	-	0.46
3	EFR Storage Tanks (100K-bbl, 250K-bbl, and 350K-bbl)	-	-	99.65
4	Cone Roof Tanks (400-bbl)	-	-	3.04
4A	IFR Truck Unloading Tanks (1K-bbl)	-	-	3.54
5	Roof Landing Emissions	-	-	44.50
6	Emergency Generator (30-hp Generac 7042)	0.43	25.60	0.23
Totals		0.43	25.60	151.42
Pre-project Total		-	-	170.18
Difference		+0.43	+25.60	-18.76

Hazardous Air Pollutants (HAPs)

Post-project speciated HAPs emitted from the tanks are listed in the following table. The emission values were based on the default values for crude oil in the TANKS 4.09 program.

Hazardous Air Pollutants

HAP	Emissions, TPY
Benzene	1.86
Ethylbenzene	0.53
Hexane	3.25
Isopropyl benzene	0.12
Toluene	2.49
Xylene	1.66
Isooctane	0.21
Total	10.11

H₂S will be emitted from the EFR tanks. H₂S emissions were estimated based on the crude oil having a maximum of 5% sulfur and assuming 10% of the sulfur existed as H₂S, or 0.5% of total vapor emitted. Then, 0.5% of 151.42 TPY = 0.77 TPY. At these emissions levels, the facility is an “area” source of HAPs.

SECTION V. PSD APPLICABILITY REVIEW

A project is not a major modification if it does not cause a significant emissions increase or a significant net emissions increase. For existing units, an emissions increase is determined as the sum of the difference between the projected actual emissions and the baseline actual emissions.

Prior to 2010, the tanks for Rose Rock (SemCrude then) and Blue Knight Energy Partners (BKEP) were considered a single source for air permitting purposes. The ODEQ separated the tanks into two separate air permits, following the issuance of Rose Rock facility’s first permit, Permit No.

2010-178-TV which included the original 23 tanks. After separation of the two facilities, landing losses were added to the BKEP facility (ID: 1105) under Permit No. 2006-141-TVR (M-5).

The following sections outline the project emissions accounting for the Rose Rock Cushing North Tank Farm. For the original 23 tanks of the Rose Rock facility, the increased roof landing events shall be reviewed together with BKEP roof landings in a project netting analysis. For storage tanks added later at Rose Rock, it would involve the review of all permits that authorized or modified construction of the new tanks, plus the addition of landing losses associated with these new tanks.

Rose Rock also proposed the addition of an emergency generator to provide backup electrical power when commercial power is unavailable. In permit application No. 2014-2368-TVR (M-2), Rose Rock requested to add 3 emergency generators. The four emergency generators will be reviewed as one project and will be evaluated separately from roof landing events.

Section V.1. Historical review before the separation

The 23 tanks originally assigned to the Cushing North Tank Farm (Facility ID: 7238) in Rose Rock’s Permit No. 2010-178-TV were part of the existing Cushing North and Central Tank Farm facility (Facility ID: 1105) and were reviewed in BKEP’s Permit No. 2006-141-TVR (M-4) as part of a culmination of a series of construction projects that occurred at the facility, according to the permit memorandum “Since the project is contemporaneous with numerous tanks constructed under Permit No. 2006-141-C (M-2), the netting analysis for PSD will be repeated including the proposed new tanks.” For simplicity, Rose Rock has permitted all roof landing events in EUG 5 and separately from tanks emissions.

Emissions Increases from Tanks and Revised Fugitives

Permit Submission Date	Permit No.	Project Description	VOC Increase (TPY)
2/2/2005	99-176-TV (M-4)	Administrative amendment	0
6/9/2005	99-176-C (M-5)	Installation of 8-250K-bbl tanks in EUG3 (T-2505 thru T-2512).	25.21 (added fugitives 0.09 + added tanks 25.12)
4/7/2006	99-176-C (M-6)	Installation of 4 500K-bbl, 1 250K-bbl, 2 100K-bbl tanks (total of seven tanks: T-5000 thru T-5003, T-2513, T-1002 and T-1003).	37.07 (added fugitives 0.09 + added tanks 36.98)
12/15/2006	2006-141-C (M-1)	Installation of 10 250K-bbl tanks (T-2514 thru T-2523); Revising previously permitted 4 500K-bbl tanks to 350-K-bbl tanks (T-3501 thru T-3504).	29.57 (added fugitives 0.09 + added tanks 33.60 - tank resizing 4.12)

Permit Submission Date	Permit No.	Project Description	VOC Increase (TPY)
9/27/2007	2006-141-C (M-2)	Installation of 10 new tanks (8 250K-bbl: T-2524 thru 2531, 2 350K-bbl: T-3505 and T-3506).	38.57 (added fugitives 0.09 + added tanks 38.48)
12/12/2018	2006-141-TVR (M-3)	Increased throughputs for EUG1A tanks (4 400-bbl)	1.64
6/17/2009	2006-141-TVR (M-4)	Installation of 5 new tanks (1 100K-bbl: T-1007, 2 250K-bbl: T-2534 and T-2535, 2 350K-bbl: T-3507 and T-3508)	19.84 (added fugitives 1.84 + added tanks 19.75)
Total			151.92

These projects were off-set by emission decreases that were achieved through the removal of older higher emitting tanks (T-27, T-44, T-45, T-49, and T-206).

Reductions from Retired Tanks

Unit	Roof Type	Capacity (bbl)	Permit	Removal Date	VOC (TPY)
T-27	FR	54,762	99-176-C (M-6)	2005	47.7
T-49	FR	54,762	99-176-C (M-6)	2005	38.1
T-44	FR	54,762	2006-141-C (M-1)	2006	40.6
T-45	FR	55,000	2006-141-C (M-2)	2007	15.9
T-206	FR	54,762	2006-141-C (M-2)	2007	23.3
Total					165.6

PSD Project Emissions Accounting

Pollutant	Creditable Contemporaneous Increases (TPY)	Creditable Contemporaneous Decreases (TPY)	Net Emission Increases (TPY)	PSD SER (TPY)	Trigger PSD or Not?
VOC	151.92	-165.6	-13.75	40	No

Section V. II. Incorporation of Landing Losses

In order to determine the amount of roof landings allowance available to Rose Rock, BKEP’s roof landing emissions are added to the entire facility’s net emissions increase analysis. After separation of the two portions of the facility, landing losses were added to the BKEP facility (ID: 1105) under Permit No. 2006-141-TVR (M-5), based on 12 landing events for the 27 tanks onsite (21 250K, 3 200K, and 3 100K barrel tanks) with a total of 12.87 TPY landing losses. The event landing loss factor (standing loss and filling loss, lbs) was estimated based on the worst-case scenario of a 250,000-bbl tank.

PSD Project Emissions Accounting with Roof Landings

Pollutant	Net Emission Increases w/o Landings (TPY)	BEKP Landing Losses (TPY)	Net Emission Increases (TPY) w/ Landings	PSD SER (TPY)	Trigger PSD or Not?
VOC	-13.75	12.87	-0.88	40	No

Based on this project netting analysis, the original 23 tanks at Rose Rock facility should be limited to less than 40.88 TPY VOC of roof landing emissions.

Section V.3. Newer Tanks Added at Rose Rock with Landing Events

Rose Rock facility’s first permit, Permit No. 2010-178-TV includes the original 23 tanks (8-350K: T-3501 thru T-3508; 14-250K: T-2522 thru T-2535; and 1-100K T-1007). For tanks added later at Rose Rock, it would involve the review of all permits that authorized or modified construction of new tanks, plus the addition of landing losses associated with these tanks.

Permit No. 2010-178-C (M-1)

The application estimated the project emissions increase was 38.15 TPY. However, as part of the project, the authorized storage material for tank T-2530 changed from crude oil to natural gas condensate. The resulting change in tank T-2530 emissions should have been addressed as a relaxation of the limits established for the tank in the historical review. Rose Rock has taken into account the credit reduction for determining the project emission increases.

Permit Submission Date	Project Description	VOC Increase (TPY)
4/22/2010	Installation of 8 250K-bbl tanks in EUG 3 (T-2536 thru T-2543) and 4 400-bbl tanks (T-00401 thru T-00404) in EUG 4; and adding 8 roof landing events in EUG 5.	added tanks in EUG 3 (12.96) + added tanks in EUG4 (6.08) + 8 landing events (8.58) + added fugitives (0.1)
Total		27.72

Permit No. 2010-178-TV (M-1) and 2010-178-TV (M-2)

Permit Submission Date	Permit No.	Project Description	VOC Increase (TPY)
9/28/2010	2010-178-TV (M-1)	Changing the Annual Compliance Certification to an earlier date.	0
10/12/2010	2010-178-TV (M-2)	Typographical errors in tank and point numbers.	0

An administrative amendment to Permit No. 2010-178-C (M-1) was submitted on October 13, 2010, requesting the 250,000-bbl tank T-2543 be re-designated as a 100,000-bbl tank T-1009, which resulted in a slight tank emission decrease that was counted as a creditable reduction. Permit No. 2010-178-TV (M-2) did not incorporate the new tanks authorized in Permit No. 2010-178-C (M-1) since they were not constructed yet.

Permit	Tank Designation	Description	VOC Emissions (tpy)
2010-178-C (M-1)	250K-bbl tank T-2543	24 turnovers and throughput of 6 MMbbl/yr	1.62
2010-178-TV (M-2)	100K-bbl tank T-1009 (requested but not incorporated yet)	30 turnovers and throughput of 3 MMbbl/yr.	1.55

Permit No. 2010-178-C (M-3)

Permit Submission Date	Project Description	VOC Increase (tpy)
4/22/2011	Installation of 12 250K-bbl tanks (T-2543 thru T-2554) and 7 100K-bbl tanks (T-1010 thru T-1016) in EUG 3; adjusting actual fugitive components numbers; adding 4 more roof landing events in EUG 5.	added tanks in EUG 3 (25.15) + added 4 landing events (4.29) + added fugitives (0.2)
Total		37.75

The twelve (12) authorized 250,000-bbl tanks (T-2543 thru T-2554) were never installed. Of the seven (7) 100,000-bbl tanks (T-1010 thru T-1016), three tanks (T-1010, T-1011, and T-1012) were constructed.

Permit No. 2010-178-C (M-4)

Permit Submission Date	Project Description	VOC Increase (tpy)
11/22/2011	Construction of truck loading operation (EUG 6); installation of 2 1K-bbl tanks (T-101 and T-102) in EUG 4A; increasing fugitive components and rates; adding 2 two roof landing events for EUG 4A tanks.	Loading losses (37.80) + added tanks (0.63) + added fugitives (0.1) + added landings (not reflected in the application or permit)
Total		38.53

Truck loading operation EUG 6 was never constructed. This permit contained inaccurate authorization of roof landings for EUG 3 and EUG 4A tanks. With verbal confirmation from Rose Rock, it was changed to 14 landing events per year in total, 12 for EUG-3 tanks and 2 for EUG 4A tanks. This permit was not impacted since it did not construct or modify 250K-bbl tanks. Permit

No. 2010-178-V (M-4) is considered a separate project since it was related to tank truck loading, unless PSD Step two contemporaneous netting is needed.

Permit No. 2014-2368-TVR

Permit No. 2014-2368-TVR was received on December 5, 2014, and authorized the four 250K-bbl tanks in EUG 3 (T-2551 thru T-2554) to be substituted with four 1,000-bbl IFR tanks (T-101 thru T-104) in EUG 4A, which resulted in slight emission decreases. Tanks T-103 and T-104 were never built.

Permit	Tank Designation	Description	VOC Emissions (TPY per tank)
2014-2368-TVR	250K-bbl EFR Tanks T-2551 thru T-2554	24 turnovers and throughput of 6 MMbbl/yr each	1.62
	1,000-bbl IFR Tanks T-101 thru T-104	1,825 turnovers and throughput of 1.8 MMbbl/yr each	0.80

Permit No. 2014-2368-TVR (M-1)

Permit application No. 2014-2368-TVR (M-1) was received on February 5, 2016. The proposals for this application involved removal of 200K-bbl storage tanks T-401 and T-402 in EUG 4, construction of two 1,000-bbl IFR tanks T-105 and T-106 in EUG 4A, addition of one roof landing per tank per year for the new tanks T-105 and T-106, and increasing throughput of EUG-4A tanks to 3,942,000-bbl per year per tank. Tanks T-401 and T-402 were removed in November 2015; and tanks T-105 and T-106 were never built and therefore no landing emissions assigned. In the email correspondence of April 30, 2020, Rose Rock pointed out the throughput of 3,942,000-bbl per year was unrealistic and requested a new throughput of 1,095,000-bbl per year per tank instead (i.e., 1,095 turnovers per year).

Project Emission Increase

EUG	Description	VOC
		TPY
2	Fugitives	0.02
3	EFR Storage Tanks (100K, 250K, 350K)	---
4A-new	IFR Truck Unloading Tanks - Construction	---
4A-relaxed	IFR Truck Unloading Tanks – Increased Throughput	1.94
5	Roof Landing Emissions	---
Total		1.96

Section V.4. Proposed Roof Landing Emissions

In this application, Rose Rock is requesting 6 more roof landing events for the 250,000-bbl tanks in EUG 3.

Post-Project Landing Emissions

Tank Size	1K	100K	250K	350K
Tank Diameter (ft)	16	120	196	233
Event Standing Loss, L _S (lbs)	0.17	10.12	26.99	38.14
Event Filling Loss, L _F (lbs)	34.79	2030.89	5312.64	7435.31
Event Total (lbs)	34.96	2041.00	5339.64	7473.45
Landing events per year	1	2	7+6= 13	2
Total Landing Losses (TPY)	0.02	2.05	34.88	7.51
Total (TPY)	44.46			

To sum up, relaxing the landing events limitation will affect all of the 250K-bbl tanks at the tank farm, and impact previous permits No. 99-176-C (M-5), 99-176-C (M-6), 2006-141-C (M-2), 2006-141-TVR (M-3), 2006-141-TVR (M-4), 2010-178-C (M-1), 2010-178-TV (M-2), 2010-178-C (M-3), 2014-2368-TVR, and 2014-2368-C (M-2). Permits issued prior to separation are reviewed in Section V.1 and permits issued after separation are reviewed in the following Section V.5.

Section V.5. Permits Re-evaluation

The above-mentioned permits that either constructed or modified 250K-bbl tanks need to be re-opened and the corresponding project emission increases re-evaluated. A comparison of authorized tanks versus tanks that were actually constructed is summarized in the following table.

Permit No.	Authorized Tanks	Constructed Tanks
2010-178-C (M-1)	8 250K-bbl tanks (T-2536 thru T-2543) in EUG3 and 4 400-bbl tanks (T-00401 thru T-00404 in EUG4.	6 250K-bbl tanks (T-2536 thru T-2541) in EUG 3 and all four 400-bbl tanks in EUG 4.
2010-178-TV (M-2)	Requested 250K-bbl tank T-2543 be re-designated as a 100K-bbl tank T-1009.	250K-bbl T-2543 built as 100K-bbl T-1009 instead.
2010-178-C (M-3)	12 250K-bbl tanks (T-2543 thru T-2554) and 7 100K-bbl tanks (T-1010 thru T-1016) in EUG3.	Zero 250K-bbl tanks and 3 100K-bbl tanks (T-1010 thru T-1012) built.

2014-2368-TV TVR	4 250K-bbl tanks (T-2551 thru T-2554) in EUG 3 were substituted with 4 1K-bbl tanks (T-101 thru T-104) in EUG 4A.	Two 1K-bbl tanks (T-101 thru T-102) were built.
2014-2368-TV (M-1)	Removing T-401 and T-402 in EUG 4A, replacing them with 2 1K-bbl tanks (T-105 and T-106); increasing throughput for the existing EUG 4A tanks (T-101 thru T-104); adding 2 roof landing events for new EUG 4A tanks.	T-401 and T-402 removed, but T-105 and T-106 were never built. T-101 thru T-104 actual throughput did not increase. Landings not added.

Of the five permits, Permit No. 2010-178-TV (M-2) modified Permit No. 2010-178-C (M-1), Permit No. 2014-2368-TV modified Permit No. 2010-178-C (M-3), and Permit No. 2014-2368-C (M-2) modified both Permits No. 2010-178-C (M-1) and 2010-178-C (M-3). Therefore, the operating permits can be reviewed as one project together with the corresponding construction permit, taking into account actual construction for creditable reductions.

2010-178-C (M-1) Actual Project Emission Increase				
EU ID	Description	Throughput, bbl/yr	VOC Emissions	
			lb/hr	TPY
T-00403	400-bbl VFR	200,000	0.35	1.52
T-00404	400-bbl VFR	200,000	0.35	1.52
T-2536	250K Crude Oil EFR	6,000,000	0.37	1.62
T-2536	250K Crude Oil EFR	6,000,000	0.37	1.62
T-2536	250K Crude Oil EFR	6,000,000	0.37	1.62
T-2536	250K Crude Oil EFR	6,000,000	0.37	1.62
T-2536	250K Crude Oil EFR	6,000,000	0.37	1.62
T-2536	250K Crude Oil EFR	6,000,000	0.37	1.62
Landing			-	8.58
Fugitives			-	0.10
Total				21.44

2010-178-C (M-3) Actual Project Emission Increase				
EU ID	Description	Throughput, bbl/yr	VOC Emissions	
			lb/hr	TPY
T-1010	100K Crude Oil EFR	2,400,000	0.22	0.97
T-1011	100K Crude Oil EFR	2,400,000	0.22	0.97
T-1012	100K Crude Oil EFR	2,400,000	0.22	0.97
T-101	1K IFR	1,095,000	-	0.97*
T-102	1K IFR	1,095,000	-	0.97*
Landing			-	4.29
Fugitives			-	0.2
Total				9.34

*T-101 and T-102 were not new installation, just throughput and calculation changes.

These two permits account for the net emissions increases since the split of the Rose Rock and BKEP facilities. Since the total change of 30.78 TPY is less than the PSD significant emission rate (SER) threshold, no further analysis is required.

PSD Applicability Review

Pollutant	Net Emission Increases (TPY)	PSD SER (TPY)	Trigger PSD or Not?
VOC	30.78	40	No

The newer tanks installed at Rose Rock facility after the separation have 12.89 TPY of landing emissions from Permits No. 2010-178-C (M-1), 2010-178-C (M-3), and 2014-2368-TVR (M-1). The existing tanks installed prior to the facility separation should be limited to less than 40.88 TPY of landing emissions (Section IV.2). Rose Rock is requesting 31.57 TPY in landing emissions for the existing tanks permitted prior to 2010 and a cap of 44.5 TPY for all roof landing events at the tank farm to remain below PSD SER.

Emergency Generators

Rose Rock proposed to add four emergency generators to provide backup electrical power when commercial power is unavailable. The equipment is expected to be Generac Model 7042 with a rated output of 22KW (approximately 30 horsepower). The project emissions are based on potential-to-emit.

Pollutant	6-1 (TPY)	6-2 (TPY)	6-3 (TPY)	6-4 (TPY)	Total Emissions (TPY)	PSD SER (TPY)	Trigger PSD or not?
NO _x	0.11	0.11	0.11	0.11	0.43	40	No
CO	6.40	6.40	6.40	6.40	25.60	100	No
VOC	0.06	0.06	0.06	0.06	0.23	40	No
PM ₁₀	0.002	0.002	0.002	0.002	0.01	15	No
SO ₂	0.0001	0.0001	0.0001	0.0001	0.0002	40	No

As indicated above, the project does not result in a significant emissions increase. Therefore, no further PSD Review is required.

Greenhouse Gases

The estimated emissions increase of greenhouse gases (CO₂-equivalent) at this site is not required since no other pollutant’s emissions increase has exceeded the PSD SERs.

SECTION VI. BEST AVAILABLE CONTROL TECHNOLOGY (BACT)

BACT is not required as emission increases are less than the PSD SERs.

SECTION VII. OKLAHOMA AIR POLLUTION CONTROL RULES

OAC 252:100-1 (General Provisions) [Applicable]
Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-2 (Incorporation by Reference) [Applicable]
This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations 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]
Subchapter 3 enumerates the primary and secondary ambient air quality standards and the significant deterioration increments. At this time, all of Oklahoma is in “attainment” of these standards.

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

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]
This facility meets the definition of a major source since it has the potential to emit regulated pollutants in excess of 100 TPY. As such, a Part 70 construction permit is required. 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 or whose actual calendar year emissions do not exceed the following limits:

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

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

OAC 252:100-13 (Open Burning) [Applicable]
Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter.

OAC 252:100-19 (Particulate Matter) [Applicable]
Section 19-4 regulates emissions of PM from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. Fuel-burning equipment is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy. 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 MMBtu/hr or less. The four emergency generators are subject to the requirements of this subchapter. However, the use of propane as fuel will not result in generator PM emissions that would approach the 0.60 lbs/MMBtu limitation.

This subchapter also limits emissions of PM from industrial processes. There are no significant PM emissions from any industrial activities at this facility.

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
This subchapter states that no person shall allow the discharge of any fumes, aerosol, mist, gas, smoke, vapor, particulate matter, or any combination thereof exhibiting greater than 20% opacity except for short term occurrences, which consist of not more than one six-minute (6) period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24-hour period. In no case shall the average of any six-minute (6) period exceed 60% opacity. Since there are no fuel-burning or PM-producing activities, compliance is assured.

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 ambient air concentration impacts of H₂S to 0.2 ppm (24-hour average). The applicant has indicated that the majority of the crude stored at the tank farm is of the “sweet” variety (i.e., negligible-to-very low sulfur content, < 0.5%). Occasionally, the applicant will store “sour” crude in an external floating roof tank. The applicant used AERSCREEN modeling to demonstrate that the ambient concentration would not be exceeded. The facility was modeled as an area source. The calculated 1-hr average concentration is 154 µg/m³. This impact is in compliance with the limit of 0.2 ppm (280 µg/m³), 24-hour average.
Part 5 limits sulfur dioxide emissions from new equipment (constructed after July 1, 1972). The emergency generators use commercial propane. The AP-42 (7/00) Table 3.2-3 emission factor of 0.00058 lbs/MMBtu is well below the new equipment standard of 0.2 lbs/MMBtu for gaseous fuels in this subchapter.

OAC 252:100-33 (Nitrogen Oxides) [Not Applicable]
This subchapter limits NO_x emissions from new fuel-burning equipment with a rated heat input greater than or equal to 50 MMBtu/hr. There is no fuel-burning equipment on location.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]
None of the following affected processes are located at this facility: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking unit, or petroleum catalytic reforming unit.

OAC 252:100-37 (Volatile Organic Compounds) [Applicable]
Part 3 requires storage tanks constructed after December 28, 1974, with a capacity between 400 and 40,000 gallons and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. The 400-bbl tanks in EUG 4 are subject to this requirement. The tanks subject to NSPS Subpart Kb are exempt from Subchapter 37.

Part 3 requires storage tanks constructed after December 28, 1974, with a capacity greater than 40,000 gallons to be equipped with a floating roof or a vapor-recovery system capable of collecting 85% or more of the uncontrolled VOCs. All of the tanks, except for the 400-bbl tanks in EUG 4, are subject to 40 CFR Part 60, Subpart Kb, therefore, they are exempt from this part.

Part 5 limits the VOC content of coatings. Any painting operation will involve maintenance coatings of buildings and equipment and emit less than 100 pounds per day of VOCs and is exempt.

OAC 252:100-42 (Toxic Air Contaminants (TAC)) [Applicable]
This subchapter regulates TAC that are emitted into the ambient air in areas of concern (AOC). Any work practice, material substitution, or control equipment required by the Department prior to June 11, 2004, to control a TAC, shall be retained, unless a modification is approved by the Director. Since no AOC has been designated there are no specific requirements for this facility at this time.

OAC 252:100-43 (Testing, Monitoring, and Recordkeeping) [Applicable]
This subchapter provides general requirements for testing, monitoring and recordkeeping and applies to any testing, monitoring or recordkeeping activity conducted at any stationary source. To determine compliance with emissions limitations or standards, the Air Quality Director may require the owner or operator of any source in the state of Oklahoma to install, maintain and operate monitoring equipment or to conduct tests, including stack tests, of the air contaminant source. All required testing must be conducted by methods approved by the Air Quality Director and under the direction of qualified personnel. A notice-of-intent to test and a testing protocol shall be submitted to Air Quality at least 30 days prior to any EPA Reference Method stack tests. Emissions and other data required to demonstrate compliance with any federal or state emission limit or standard, or any requirement set forth in a valid permit shall be recorded, maintained, and submitted as required by this subchapter, an applicable rule, or permit requirement. Data from any required testing or monitoring not conducted in accordance with the provisions of this subchapter shall be considered invalid. Nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

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

OAC 252:100-11	Alternative Emissions Reduction	not requested
OAC 252:100-15	Mobile Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Grain Elevators	not in source category
OAC 252:100-39	Nonattainment Areas	not in area category
OAC 252:100-47	Municipal Solid Waste Landfills	not in area category

SECTION VIII. FEDERAL REGULATIONS

PSD, 40 CFR Part 52

[Not Applicable to This Modification]

Total potential emissions for VOC is greater than the threshold level of 100 TPY. Any added emissions above the VOC significance level of 40 TPY will trigger PSD review. Added VOC emissions are below the 40 TPY level of significance. This modification does not trigger a PSD review.

NSPS, 40 CFR Part 60

[Subparts Kb and JJJJ Applicable]

Subpart Kb, VOL Storage Vessels. This subpart applies to volatile organic liquids storage vessels (including petroleum liquids storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984, and which have a capacity of 19,813 gallons (75 cubic meters) or more. 40 CFR §60.112b specifies that vessels with a design capacity greater than or equal to 39,980 gallons containing a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 0.75 psia but less than 11 psia shall have one of the following vapor control devices: an external fixed roof in combination with an internal floating roof; an external floating roof; a closed vent system to a control device (flare, condenser, or absorber); or an equivalent system.

All of the tanks, except the 400-bbl tanks in EUG 4, are subject to this subpart and should meet either the internal or external floating roof requirements in §60.112b. The permittee should also comply with testing requirements defined in §60.113b, the reporting and recordkeeping requirements defined in §60.115b, and the monitoring requirements defined in §60.116b of this subpart. In addition, the facility shall comply with all the applicable requirements 40 CFR Part 60 Subpart A including the notifications as described in §60.7.

Subpart VV, Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry (SOCMI). The equipment is not in a SOCMI plant.

Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines (SI-ICE). This subpart promulgates emission standards for all new SI engines ordered after June 12, 2006, and all SI engines modified or reconstructed after June 12, 2006, regardless of size.

Emergency generators 6-1 through 6-4 are propane-fired emergency generators manufactured after the applicable threshold date and are subject to requirements of this subpart for emergency generator engines at an area source.

Subpart OOOO, Crude Oil and Natural Gas Production, Transmission, and Distribution. This subpart affects natural gas wells, centrifugal compressors, reciprocating compressors, pneumatic controllers, storage vessels, onshore natural gas processing plants, and onshore natural gas

sweetening units that commence construction, modification, or reconstruction after August 23, 2011, and on or before September 18, 2015. The storage vessels are subject to NSPS Subpart Kb and therefore exempt from NSPS Subpart OOOO.

Subpart OOOOa, Crude Oil and Natural Gas Facilities. This subpart applies to hydraulically fractured wells, centrifugal compressors, reciprocating compressors, pneumatic controllers and pumps, natural gas processing plants, storage vessels, equipment leaks, and natural gas sweetening units that commence construction, modification, or reconstruction after September 18, 2015. All equipment that commenced construction after this date including the storage vessels and equipment leaks at this facility are potentially subject. The storage vessels are subject to NSPS Subpart Kb and therefore exempt from NSPS Subpart OOOOa.

NESHAP, 40 CFR Part 61

[Not Applicable]

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

[Subpart ZZZZ Applicable]

Subpart R, Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), only applies to gasoline storage facilities which are major sources of HAPs (10 tons/year for a single HAP, 25 tons/year combined). This facility does not store gasoline and is not a major source of HAPs.

Subpart EEEE, Organic Liquids Distribution (Non-Gasoline). This subpart affects organic liquid distribution (OLD) operations at major sources of HAP emissions. Based on emission calculations this facility is not a major source of HAPs.

Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE). This subpart affects RICE that are located at area and major sources of HAP emissions. Owners and operators of new and reconstructed stationary SI-ICE engines at area sources of HAP emissions are required to meet the requirements of 40 CFR Part 60, Subpart IIII or JJJJ as appropriate. All four emergency generators are subject to this subpart and will comply with this subpart by complying with NSPS Subpart JJJJ.

Compliance Assurance Monitoring, 40 CFR Part 64

[Not Applicable]

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

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

There are no active control devices on the tanks, therefore the regulation does not apply.

Chemical Accident Prevention Provisions, 40 CFR Part 68

[Not Applicable]

The definition of a stationary source does not apply to transportation, including storage incident to transportation, of any substance or any other extremely hazardous substance under the provisions of this part. Naturally occurring hydrocarbon mixtures, prior to entry into a natural gas processing

plant or a petroleum refining process unit, including: condensate, crude oil, field gas, and produced water, are exempt for the purpose of determining whether more than a threshold quantity of a regulated substance is present at the stationary source. More information on this federal program is available on the web page: www.epa.gov/rmp.

Stratospheric Ozone Protection, 40 CFR Part 82 [Subpart A and F Applicable]
These standards require phase out of Class I & II substances, reductions of emissions of Class I & II substances to the lowest achievable level in all use sectors, and banning use of nonessential products containing ozone-depleting substances (Subparts A & C); control servicing of motor vehicle air conditioners (Subpart B); require Federal agencies to adopt procurement regulations which meet phase out requirements and which maximize the substitution of safe alternatives to Class I and Class II substances (Subpart D); require warning labels on products made with or containing Class I or II substances (Subpart E); maximize the use of recycling and recovery upon disposal (Subpart F); require producers to identify substitutes for ozone-depleting compounds under the Significant New Alternatives Program (Subpart G); and reduce the emissions of halons (Subpart H).

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

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

The standard conditions of the permit address the requirements specified at § 82.156 for persons opening appliances for maintenance, service, repair, or disposal; § 82.158 for equipment used during the maintenance, service, repair, or disposal of appliances; § 82.161 for certification by an approved technician certification program of persons performing maintenance, service, repair, or disposal of appliances; § 82.166 for recordkeeping; § 82.158 for leak repair requirements; and § 82.166 for refrigerant purchase records for appliances normally containing 50 or more pounds of refrigerant.

SECTION IX. COMPLIANCE

A. Tier Classification and Public Review

The proposal is considered a relaxation of underlying enforceable permit limitations of historical projects and has been determined to be **Tier II** based on the request for a permit limit change to avoid PSD. Public review and EPA review of the application and permit are required. Information on all permit actions is available for review by the public in the Air Quality Section of the DEQ web page: www.deq.ok.gov.

The applicant submitted an affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certifies that the applicant has a current lease or easement which is given to accomplish the permitted purpose.

The applicant published the “Notice of Filing a Tier II Application” in *The Stillwater NewsPress*, a local newspaper in Payne County, on October 30, 2019. The notice stated that the application was available for public review at Cushing Public Library, 215 N Steele Avenue, Cushing, Oklahoma and at the Air Quality Division’s main office at 707 North Robinson, Oklahoma City, Oklahoma. The applicant will also publish the “Notice of Tier II Draft Permit” in a local newspaper.

B. State Review

This facility is not located within 50 miles of the Oklahoma border. Therefore, no bordering states will be notified of the draft permit.

C. EPA Review

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

D. Fees Paid

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

SECTION XI. SUMMARY

The facility has demonstrated the ability to comply with the requirements of the several air pollution control rules and regulations. Ambient air quality standards are not threatened at this site. There are no Air Quality compliance or enforcement issue concerning this project. Issuance of the permit is recommended, contingent upon EPA and public review.

**PERMIT TO OPERATE
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS**

**Rose Rock Midstream, LP
Cushing North Tank Farm**

Permit No. 2014-2368-C (M-2)

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on September 9, 2019 and January 20, 2020, and all supplemental materials. The Evaluation Memorandum dated June 15, 2020, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Commencing construction or continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein:

1. Point of emission and emission limitations: [OAC 252:100-8-6(a)(1)]

EUG 2 - Fugitives

EU ID	Point ID	Source	# Items
F1	F1	Pump Seals – light oil	10
F2	F2	Valves – light oil	297
F3	F3	Flanges – light oil	964
F4	F4	Other	168
F5	F5	Loading Boxes	6

EUG 3 - Storage Tanks

EU ID#	Point ID#	Roof Type	Capacity (bbl.)
T-1007	1007	EFR	100,000
T-1009	1009	EFR	100,000
T-1010	1010	EFR	100,000
T-1011	1011	EFR	100,000
T-1012	1012	EFR	100,000
T-2522	2522	EFR	250,000
T-2523	2523	EFR	250,000
T-2524	2524	EFR	250,000
T-2525	2525	EFR	250,000
T-2526	2526	EFR	250,000
T-2527	2527	EFR	250,000
T-2528	2528	EFR	250,000
T-2529	2529	EFR	250,000
T-2530	2530	EFR	250,000
T-2531	2531	EFR	250,000
T-2532	2532	EFR	250,000
T-2533	2533	EFR	250,000

EU ID#	Point ID#	Roof Type	Capacity (bbl.)
T-2534	2534	EFR	250,000
T-2535	2535	EFR	250,000
T-2536	2536	EFR	250,000
T-2537	2537	EFR	250,000
T-2538	2538	EFR	250,000
T-2539	2539	EFR	250,000
T-2540	2540	EFR	250,000
T-2541	2541	EFR	250,000
T-3501	3501	EFR	350,000
T-3502	3502	EFR	350,000
T-3503	3503	EFR	350,000
T-3504	3504	EFR	350,000
T-3505	3505	EFR	350,000
T-3506	3506	EFR	350,000

- a) Total VOC emissions from the tanks in this EUG shall not exceed 99.65 TPY VOC, 12-month rolling totals, excluding roof landing emissions.
- b) Emissions from each tank shall be calculated each month based on the liquid stored and throughput. Compliance with the cap shall be determined monthly.
- c) All above tanks are subject to federal New Source Performance Standards (NSPS), 40 CFR Part 60 Subpart Kb, and shall comply with all applicable standards including but not limited to the following requirements: [40 CFR Part 60, Subpart Kb]
 - i. External floating roof standards:
 - 1) The external floating roof shall be floating on the liquid surface at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [§60.112b(a)(2)(iii)]
 - 2) Each opening in the external floating roof except for rim space vents and automatic bleeder vents shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the floating roof is to be maintained in a closed position at all times (i.e., no visible gaps) except when the device is in actual use. [§60.112b(a)(2)(ii)]
 - 3) Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or landed on the roof leg supports. [§60.112b(a)(2)(ii)]
 - 4) Rim space vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting or when the external floating roof is not floating. [§60.112b(a)(2)(ii)]
 - 5) Automatic bleeder vents and rim space vents are to be gasketed. [§60.112b(a)(2)(ii)]

- 6) Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. [§60.112b(a)(2)(ii)]
 - 7) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in §60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in §60.113b(b)(4). [§60.112b(a)(2)(i)]
 - 8) The primary seals shall be checked every 5 years. The secondary seal on an external floating roof shall be checked at least yearly for gaps. The secondary seal gap area to tank circumference ratio shall not exceed 1 square inch per foot of tank diameter nor shall any gap exceed 0.5 inches. The primary seal gap area to tank circumference ratio shall not exceed 10 square inch per foot of tank diameter nor shall any gap exceed 1.5 inches. [§60.113b(b)(1), (b)(4)(i), & (b)(4)(ii)(B)]
 - 9) Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in §60.113b (b)(4)(i) and (ii). [§60.113b(b)(4)]
- ii. Standards for all floating roof tanks:
- 1) The owner or operator shall visually inspect the floating roof, the primary seal, the secondary seal (if present), gaskets, slotted membranes (if present), and sleeve seals (if present) each time the storage vessel is emptied and degassed. If the floating roof has defects, the primary seal has holes, tears, or other openings in the seal or seal fabric; or the secondary seal has holes, tears, or other openings in the seal or seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10% open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exists before refilling the storage vessel with volatile organic liquid (VOL). [§60.113b(b)(6)]
 - 2) The owner or operator shall notify Air Quality in writing at least 30 days prior to filling or refilling of this storage vessel for which inspection is required by 40 CFR §60.113b(6) or prior to any gap measurements required by 40 CFR §60.113b(b)(1) to afford Air Quality an opportunity to have an observer present. If the inspection is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify Air Quality at least seven days prior to refilling the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by Air Quality at least seven days prior to refilling. [§60.113b(b)(6)& (b)(5)]

- 3) The owner or operator of these storage vessels shall keep records and furnish reports as required by 40 CFR §60.115b. Copies of these reports and records shall be kept for at least two years following the date on which they were made.

EUG 4 – Storage Tanks – Cone Roof

EU ID	Point ID	Roof Type	Capacity (bbl.)	Throughput (bbl./tank/yr.)	VOC Emissions, TPY
T-403	403	Cone	400	200,000	1.52
T-404	404	Cone	400	200,000	1.52

- a) The tanks are limited to the listed emissions and throughputs. Compliance with the annual emissions shall be determined monthly and be based on the listed 12-month rolling throughput totals.
- b) The tanks shall be operated with permanent submerged fill pipes.

EUG 4A – New Truck Loading Tanks

EU ID	Point ID	Roof Type	Capacity (bbl.)	Throughput (bbl./tank/yr.)	VOC Emissions, TPY
T-101	101	IFR	1,000	1,095,000	1.78
T-102	102	IFR	1,000	1,095,000	1.78

- a) The tanks are limited to the listed emissions and throughputs. Compliance with the annual emissions shall be determined monthly and be based on the listed 12-month rolling throughput totals.
- b) All above tanks are subject to 40 CFR Part 60 NSPS Subpart Kb, and shall comply with all applicable standards including but not limited to the following requirements:

[40 CFR Part 60, Subpart Kb]

 - i. Internal floating roof standards:
 - 1) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) at all times except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [§60.112b(a)(1)(i)]
 - 2) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position (i.e., no visible gaps) except when in actual use. The cover or lid shall be equipped with a gasket. Covers on the access hatch and each automatic gauge float well shall be bolted except when in use. [§60.112b(a)(1)(iv)]
 - 3) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or landed on the roof leg supports. [§60.112b(a)(1)(v)]

- 4) Rim space vents shall be equipped with a gasket and are to be set to open only at the manufacturer's recommended setting or when the internal floating roof is not floating. [§60.112b(a)(1)(vi)]
 - 5) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof: [§60.112b(a)(1)(ii)]
 - (A) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal).
 - (B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof.
 - (C) A mechanical shoe seal.
 - 6) Each penetration of the internal floating roof that allows for passage of a column or ladder shall have a flexible fabric sleeve seal or a gasketed sliding cover. [§60.112b(a)(1)(ii)]
 - 7) Visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. [§60.113b(a)(2)]
- ii. Standards for all floating roof tanks:
- 1) The owner or operator shall visually inspect the floating roof, the primary seal, the secondary seal (if present), gaskets, slotted membranes (if present), and sleeve seals (if present) each time the storage vessel is emptied and degassed. If the floating roof has defects, the primary seal has holes, tears, or other openings in the seal or seal fabric; or the secondary seal has holes, tears, or other openings in the seal or seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10% open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exists before refilling the storage vessel with volatile organic liquid (VOL). [§60.113b(a)(4)]
 - 2) The owner or operator shall notify Air Quality in writing at least 30 days prior to filling or refilling of this storage vessel for which inspection is required by 40 CFR §60.113b to afford Air Quality an opportunity to have an observer present. If the inspection is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify Air Quality at least seven days prior to refilling the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by Air Quality at least seven days prior to refilling. [§60.113b(a)(5)]

- 3) The owner or operator of these storage vessels shall keep records and furnish reports as required by 40 CFR §60.115b. Copies of these reports and records shall be kept for at least two years following the date on which they were made.

EUG 5 - Roof Landings

EU ID	Tank Size (bbl)	Number of Tanks	Events Per Year
EUG-3 tanks	100K	5	2
EUG-3 tanks	250K	20	13
EUG-3 tanks	350K	6	2
EUG-4A tanks	1K	2	1

- a) This facility is limited to a cap of 44.5 TPY of VOC for all roof landing events based on a 12-month rolling total.
- b) Records shall be kept of the number of landings per year for each tank size.
- c) Landing emissions shall be calculated and compliance with the cap determined each month.

EUG 6 - Emergency Generators

EU	Make/Model	HP	Fuel
6-1	Generac 7042	30	Propane
6-2	Generac 7042	30	
6-3	Generac 7042	30	
6-4	Generac 7042	30	

The emergency generators are limited to EPA Tier 3, nonroad requirements.

2. Upon issuance of an operating permit, the permittee shall be authorized to operate this facility continuously (24 hours per day, every day of the year). [OAC 252:100-8-6(a)]
3. The facility may handle “sweet” or “sour” crude with a sulfur content of 5% or less in any external floating roof tank. The crude oil in each tank shall be classified as “sweet” or “sour” based on sulfur content, and records of classification and sulfur content shall be kept each month for each tank of crude oil classification and sulfur content. [OAC 252:100-31]
4. Each piece of equipment to which these specific conditions apply shall have a permanent means of identification which distinguishes it from other equipment. [OAC 252:100-8-5 (e)(3)(B)]
5. The permittee shall comply with all applicable requirements in 40 CFR Part 60, Subpart JJJJ, for all stationary spark ignition (SI) internal combustion engines (ICE) that commenced construction, modification, or reconstruction after June 12, 2006, including, but not limited to, the following. [40 CFR §§ 60.4230 to 60.4248]
 - a) §60.4230 Am I subject to this subpart?
 - b) The emission standards of §60.4233 and §60.4234.
 - c) The fuel requirements of §60.4235.

- d) The deadlines for importing or installing SI ICE produced in the previous model year in accordance with §60.4236.
 - e) The monitoring requirements of §60.4237.
 - f) The compliance requirements of §60.4243.
 - g) The performance test methods and other procedures of §60.4244.
 - h) The notification, reporting, and recordkeeping requirements of §60.4245.
 - i) §60.4246 What parts of the General Provisions apply to me?
 - j) §60.4248 What definitions apply to this subpart?
6. The permittee shall comply with all applicable requirements in 40 CFR Part 63, Subpart ZZZZ, for any existing, new, or reconstructed reciprocating internal combustion engines (RICE) including, but not limited to, the following. [40 CFR §§ 63.6580 to 63.6675]
- a) § 63.6580 What is the purpose of subpart ZZZZ?
 - b) § 63.6585 Am I subject to this subpart?
 - c) § 63.6590 What parts of my plant does this subpart cover?
 - d) § 63.6595 When do I have to comply with this subpart?
 - e) § 63.6600 What emission limitations and operating limitations must I meet?
 - f) § 63.6603 What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?
 - g) § 63.6604 What fuel requirements must I meet if I own or operate a stationary CI RICE?
 - h) § 63.6605 What are my general requirements for complying with this subpart?
 - i) § 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate a new or reconstructed 4SLB SI stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake horsepower located at a major source of HAP emissions?
 - j) § 63.6612 By what date must I conduct the initial performance tests or other initial compliance demonstrations if I own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake horsepower located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions?
 - k) § 63.6615 When must I conduct subsequent performance tests?
 - l) § 63.6620 What performance tests and other procedures must I use?
 - m) § 63.6625 What are my monitoring, installation, collection operation, and maintenance requirements?
 - n) § 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations and other requirements?
 - o) § 63.6635 How do I monitor and collect data to demonstrate continuous compliance?
 - p) § 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations and other requirements?
 - q) § 63.6645 What notifications must I submit and when?
 - r) § 63.6650 What reports must I submit and when?
 - s) § 63.6655 What records must I keep?
 - t) § 63.6660 In what form and how long must I keep my records?
 - u) § 63.6665 What parts of the General Provisions apply to me?
 - v) § 63.6670 Who implements and enforces this subpart?

- w) § 63.6675 What definitions apply to this subpart?
7. The permittee shall maintain records of operations as listed below. These records shall be retained onsite for at least five years from the date of recording, inspection, testing, or repair, and shall be made available to regulatory representatives upon request. [OAC 252:100-8-6 (a)(3)(B)]
- a) Throughput for each tank in Specific Condition No. 1 (monthly and 12-month rolling totals calculated no later than 30 days after the end of each 12-month period.) Throughput shall be derived from flow measurement.
 - b) Inspection and maintenance records as required by NSPS Subpart Kb.
 - c) Records of emissions calculations demonstrating compliance with the permitted emission limits in Specific Condition No.1 (monthly and 12-month rolling total).
 - d) Records of crude oil classification (“sour” or “sweet”) and sulfur content of crude oil in each tank (monthly).
 - e) A record of all roof landing events, including calculations of emissions (in TPY, monthly and 12-month rolling total).
 - f) Records required by NSPS Subparts Kb and JJJJ.
 - g) Records required by NESHAP Subpart ZZZZ.
 - h) Annual hours of operation for each emergency generator.
8. The Permit Shield (Standard Conditions, Section VI) is extended to the following requirements that have been determined to be inapplicable to this facility. [OAC 252:100-8-6(d)(2)]
- a) OAC 252:100-7 Permits for Minor Facilities
 - b) OAC 252:100-11 Alternative Emissions Reduction
 - c) OAC 252:100-15 Mobile Sources
 - d) OAC 252:100-39 Nonattainment Areas
9. This permittee shall apply for a modified operating permit within 180 days of implementing the changes authorized by this permit.

Scott A. Thompson
Executive Director



Kevin Stitt
Governor

Mr. David Hennesy
Rose Rock Midstream Crude
8111 Westchester Drive, Suite 600
Dallas, TX 75225

SUBJECT: Part 70 Operating Permit Renewal No. **2014-2368-C (M-2)**
Cushing North Tank Farm
Facility ID: 7238
Section 22, Township 18N, Range 5E, Payne County, OK

Dear Mr. Hennesy:

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) for both the application and draft permit in at least one newspaper of general circulation within the county where the facility is located. (Instructions enclosed)
2. Provide for public review (for a period of 30 days following the date of the newspaper announcement) a copy of this draft permit on the DEQ website and access to the application through the DEQ website.
3. Send AQD a written affidavit of publication for the notices from Item #1 above together with any additional comments or requested changes, which you may have for the permit application within 20 days of publication.

The permit review time is hereby tolled pending the receipt of the affidavit of publication. Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact the permit writer at Ge.Li@deq.ok.gov or (405) 702-4200.

Sincerely,

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



PART 70 PERMIT

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

Permit No. 2014-2368-C (M-2)

Rose Rock Midstream, LP

having complied with the requirements of the law, is hereby granted permission to modify the Cushing North Tank Farm at Section 22, Township 18N, Range 5E, Payne County, Oklahoma subject to standard conditions dated June 21, 2016, and specific conditions, both attached.

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

**Division Director
Air Quality Division**

Date

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

SECTION I. DUTY TO COMPLY

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

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

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

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

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

SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

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

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

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

SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING

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

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

B. Records of required monitoring shall include:

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

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

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

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

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

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

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

[OAC 252:100-43]

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

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

G. Any owner or operator subject to the provisions of New Source Performance Standards ("NSPS") under 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants ("NESHAPs") under 40 CFR Parts 61 and 63 shall maintain a file of all measurements and other

information required by the applicable general provisions and subpart(s). These records shall be maintained in a permanent file suitable for inspection, shall be retained for a period of at least five years as required by Paragraph A of this Section, and shall include records of the occurrence and duration of any start-up, shutdown, or malfunction in the operation of an affected facility, any malfunction of the air pollution control equipment; and any periods during which a continuous monitoring system or monitoring device is inoperative.

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

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

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

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

K. The permittee shall submit to the AQD a copy of all reports submitted to the EPA as required by 40 C.F.R. Part 60, 61, and 63, for all equipment constructed or operated under this permit subject to such standards. [OAC 252:100-8-6(c)(1) and OAC 252:100, Appendix Q]

SECTION IV. COMPLIANCE CERTIFICATIONS

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

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

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source. [OAC 252:100-8-6(c)(5)(C)(i)-(v)]

C. The compliance certification shall contain a certification by a responsible official as to the results of the required monitoring. This certification shall be signed by a responsible official, and shall contain the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." [OAC 252:100-8-5(f) and OAC 252:100-8-6(c)(1)]

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

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

SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

The permittee shall comply with any additional requirements that become effective during the permit term and that are applicable to the facility. Compliance with all new requirements shall be certified in the next annual certification. [OAC 252:100-8-6(c)(6)]

SECTION VI. PERMIT SHIELD

A. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC 252:100-8) shall be deemed compliance with the applicable requirements identified and included in this permit. [OAC 252:100-8-6(d)(1)]

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

SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

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

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

SECTION VIII. TERM OF PERMIT

A. Unless specified otherwise, the term of an operating permit shall be five years from the date of issuance. [OAC 252:100-8-6(a)(2)(A)]

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

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

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

SECTION IX. SEVERABILITY

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

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

SECTION X. PROPERTY RIGHTS

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

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

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

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

SECTION XI. DUTY TO PROVIDE INFORMATION

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

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

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

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

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

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

SECTION XII. REOPENING, MODIFICATION & REVOCATION

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

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

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

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

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

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

[OAC 100-8-7.3(d)]

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

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

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

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

SECTION XIII. INSPECTION & ENTRY

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

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

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

SECTION XIV. EMERGENCIES

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

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

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

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

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

[OAC 252:100-8-2]

D. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that:

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

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

E. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

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

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

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

SECTION XV. RISK MANAGEMENT PLAN

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

SECTION XVI. INSIGNIFICANT ACTIVITIES

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

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

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

SECTION XVII. TRIVIAL ACTIVITIES

Except as otherwise prohibited or limited by this permit, the permittee is hereby authorized to operate any individual or combination of air emissions units that are considered inconsequential and are on the list in Appendix J. Any activity to which a State or Federal applicable requirement applies is not trivial even if included on the trivial activities list.

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

SECTION XVIII. OPERATIONAL FLEXIBILITY

A. A facility may implement any operating scenario allowed for in its Part 70 permit without the need for any permit revision or any notification to the DEQ (unless specified otherwise in the permit). When an operating scenario is changed, the permittee shall record in a log at the facility the scenario under which it is operating. [OAC 252:100-8-6(a)(10) and (f)(1)]

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

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

provided that the facility provides the EPA and the DEQ with written notification as required below in advance of the proposed changes, which shall be a minimum of seven (7) days, or twenty four (24) hours for emergencies as defined in OAC 252:100-8-6 (e). The permittee, the DEQ, and the EPA shall attach each such notice to their copy of the permit. For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or

condition that is no longer applicable as a result of the change. The permit shield provided by this permit does not apply to any change made pursuant to this paragraph. [OAC 252:100-8-6(f)(2)]

SECTION XIX. OTHER APPLICABLE & STATE-ONLY REQUIREMENTS

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

- (1) Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in the Open Burning Subchapter. [OAC 252:100-13]
- (2) No particulate emissions from any fuel-burning equipment with a rated heat input of 10 MMBTUH or less shall exceed 0.6 lb/MMBTU. [OAC 252:100-19]
- (3) For all emissions units not subject to an opacity limit promulgated under 40 C.F.R., Part 60, NSPS, no discharge of greater than 20% opacity is allowed except for: [OAC 252:100-25]
 - (a) Short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity;
 - (b) Smoke resulting from fires covered by the exceptions outlined in OAC 252:100-13-7;
 - (c) An emission, where the presence of uncombined water is the only reason for failure to meet the requirements of OAC 252:100-25-3(a); or
 - (d) Smoke generated due to a malfunction in a facility, when the source of the fuel producing the smoke is not under the direct and immediate control of the facility and the immediate constriction of the fuel flow at the facility would produce a hazard to life and/or property.
- (4) No visible fugitive dust emissions shall be discharged beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. [OAC 252:100-29]
- (5) No sulfur oxide emissions from new gas-fired fuel-burning equipment shall exceed 0.2 lb/MMBTU. No existing source shall exceed the listed ambient air standards for sulfur dioxide. [OAC 252:100-31]
- (6) Volatile Organic Compound (VOC) storage tanks built after December 28, 1974, and with a capacity of 400 gallons or more storing a liquid with a vapor pressure of 1.5 psia or greater under actual conditions shall be equipped with a permanent submerged fill pipe or with a vapor-recovery system. [OAC 252:100-37-15(b)]
- (7) All fuel-burning equipment shall at all times be properly operated and maintained in a manner that will minimize emissions of VOCs. [OAC 252:100-37-36]

SECTION XX. STRATOSPHERIC OZONE PROTECTION

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

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

B. If the permittee performs a service on motor (fleet) vehicles when this service involves an ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all applicable requirements. Note: The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the 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]