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OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM **April 5, 2017**

TO: Phillip Fielder, P.E., Permits and Engineering Group Manager

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

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

THROUGH: Jian Yue, P.E., New Source Permits Section

FROM: Iftekhar Hossain, P.E., New Source Permits Section

SUBJECT: Evaluation of Permit Application No. **2016-0193-TVR3**
DCP Operating Company, LP
Sholem Gas Plant (Facility ID: 1038)
Section 2, T1S, R4W, Stephens County, Oklahoma
Latitude: 34.49425° N; Longitude: 97.58698° W
Directions: From Ratliff City at the junction of SH 76 and SH 7, go 4 miles west on SH 7 then head 4 miles north, ½ mile west and then north to the facility.

SECTION I. INTRODUCTION

DCP Operating Company, LP (DCP) has applied for renewal of the Part 70 operating permit for their Sholem Gas Plant (SIC 1321) located in Stephens County, Oklahoma. The facility is currently operating under Permit No. 2011-064-TVR2 (M-1) issued on September 20, 2016. As part of the Part 70 operating permit renewal process, DCP requests the following updates/revisions to the current operating permit [No. 2011-064-TVR2 (M-1)].

1. Correct the thermal oxidizer's maximum heat rate from 3.0 MMBtu/hr to 6.9 MMBtu/hr. The change results in an increase of 1.67 TPY of NOx, 1.41 TPY of CO, and 0.09 TPY of VOC.
2. Add a maintenance activity: depressurize the Y-grade loading hoses. The hoses would require depressurizing for inspection and replacement (six times per year). This activity would result in a blowdown event (B2) with 0.31 TPY of VOC emissions.

The PSD Applicability Analysis, as presented in Table 8 (Section IV), shows that the above revision to the emissions will not result in an increase of any criteria pollutant to the PSD significance level. Therefore, no PSD review is required.

In addition, DCP has requested to update/correct the following items of the current permit.

1. DCP had mistakenly indicated that the emergency engine, GEN-1 was a generator. Actually, it is an emergency use utility water pump engine. DCP requests revising the

source ID to UTILITY-1. Also, the engine is not a diesel fired engine. It is an existing natural gas fired engine (SI RICE). DCP requests that the description be revised to "emergency" SI RICE engine subject to NESHAP Subpart ZZZZ.

2. The emissions from UTILITY-1 have been revised and are based on 500 hours/year of operations.
3. DCP notes that a vent V-5 is indicated as "grandfathered". However the table fails to identify V-5. DCP has requested to include V-5 in the table of EUG G-4 for completeness.
4. DCP also reviewed the tank emissions for the 3 sump tanks (S-19071, S-19072, and S-19073) and the 4 storage tanks (TNK-1, TNK-2, TK-19091, and TK-19092). Emission estimates for each of these tanks have been updated to more closely estimate the emissions associated with each.

Since the facility emits more than 100 TPY of a regulated pollutant, it is subject to Part 70 permitting requirements and its renewal process needs to go through **Tier II** permitting category. Therefore, public notice and EPA review will be required. Emission units (EUs) have been arranged into Emission Unit Groups (EUGs) as shown in the "Equipment" section below. Field-grade natural gas is the primary fuel with the engines being operated continuously.

SECTION II. PROCESS DESCRIPTION

The Sholem Gas Plant is a 75 MMscf/day cryogenic processing facility that removes hydrocarbon liquids from raw natural gas. This liquid (NGL) is sold to third party companies via pipelines for further processing. The remaining (residue) gas is sold to third party pipelines for industrial and residential use.

Sholem receives both low and high pressure gas from the field through pipelines. The low pressure gas is compressed in 3-stage compressor units (C-4 and C-5) from about 3 psig up to typically 600 psig where it combines with the high pressure inlet gas. The high pressure gas comes in from field compressor stations (and some high pressure wells) at typically 600 psig.

Pipeline liquids are associated with the high pressure inlet gas due to cooling and condensation in the pipelines. Periodic pigging is required to clear (push) these liquids into the plant. The plant has inlet receiver vessels to separate the liquids from the gas. These liquids are flashed to lower pressure bullet tanks where "flash stabilization" drops the vapor pressure of the liquids to where they can be either trucked out or pipelined to sales. The flashed vapor is measured and returns to the low pressure gathering system where it is recovered with the low pressure inlet gas. The stabilized liquid is usually called plant condensate. The plant condensate at Sholem is currently pumped through a meter and goes to the Countyline facility. The Countyline facility receives trucked-in condensate from other plants and locations. The liquids from Countyline are pumped to pipeline sales.

The combined low and high pressure gas goes through one additional stage of inlet compression in units C-1, C-2, and C-3. These units are 'combination units' since they provide both inlet and residue compression. This last stage of compression boosts the pressure from about 600 psig to typically 860 psig. This is the plant inlet feed.

Among other things, the plant inlet contains carbon dioxide and trace amounts of hydrogen sulfide. Both are contaminants with respect to liquid (NGL) product and require removal. Sholem processes it through an amine system utilizing 30 wt% DEA. The amine system is essentially a closed loop system but it does generate a waste gas stream consisting of carbon dioxide (CO_2), hydrogen sulfide (H_2S), water vapor, and trace amounts of hydrocarbon. This stream is taken to a thermal oxidizer or flare for combustion of the H_2S and hydrocarbons before releasing to the atmosphere. DCP collected H_2S sample using Draeger Tubes at different facilities surrounding Sholem gas plant. The average over a recent 7-week period was 0.7 ppmv. Hot oil provides heat for amine regeneration. The off-gases from the amine unit's flash tank are routed to the low pressure gathering system.

The gas from the amine system is saturated with water and this is "bulk-removed" down to 7 lbs/MMSCF with a TEG dehydration system. This also is essentially a closed loop system but there is a regenerator vent stream which contains mostly water but also trace amounts of hydrocarbons and aromatics. These are combined with the amine waste gas which goes to the thermal oxidizer (or flare) for conversion. Hot oil provides heat for TEG regeneration.

The inlet gas then goes through the mole sieve dehydration system which removes all remaining water which is necessary to avoid freeze-ups when cooling the gas to cryogenic temperatures. The wet sieve is then regenerated by utilizing a smaller, hot gas stream to remove the water from the mole sieve. This hot, wet regenerated gas is then cooled in an air fin exchanger to condense the water for removal. The regenerated gas is further processed in a small TEG contactor to remove the saturated water before the gas combines with plant residue gas to sales. The TEG for this small glycol contactor comes from the same system as the main plant TEG system. The overhead still from the small TEG still vent combines with the main plant TEG still vent and the amine vent stream and are routed to the TO or plant flare for combustion.

After mole sieve dehydration, the gas goes through the cryogenic plant where the expansion/ refrigeration processes are used to achieve cryogenic temperatures to partially liquefy the gas. This stream is then fed to a demethanizer tower to drive methane from the liquid to make a saleable NGL product. The overhead from the demethanizer goes to residue sales pipelines.

As part of the cryogenic process, a closed loop propane refrigeration system is required to provide additional cooling/condensation of the inlet gas. Propane compressors (C-8 and C-9) compress the cool propane vapor from about 5 psig to 200 psig. This goes through propane air fin condensers to liquefy the propane. From there, the liquid propane is sub-cooled in exchangers and flashed into low pressure chillers to cool and liquefy the inlet gas.

The residue from the cryogenic plant is compressed in the combination units C-1, C-2, and C-3. For residue service, these units provide 2-stage compression from about 200 psig up to 750 psig and then delivered to the residue sales pipelines.

The NGL liquid product from the cryogenic plant are pumped up to pipeline pressure and delivered to the liquid sales pipelines.

SECTION III. EQUIPMENT

Emission units (EUs) have been arranged into Emission Unit Groups (EUGs) as outlined in Section III. The equipment added under this permit are accommodated into the existing EUG and/or created new EUGs.

EUG G-1 Internal Combustion Engines

EU ID #	Point	Make/Model	HP	Serial #	Manuf. Date	Const. Date
C-1	C-1	Caterpillar G3608 w/OC	2,370	BEN00457	2011	2011
C-2	C-2	Caterpillar G3608 w/OC	2,370	BEN00540	2011	2011
C-3	C-3	Caterpillar G3608 w/OC	2,370	BEN00537	2011	2011
C-4	C-4	Caterpillar G3606 w/OC	1,775	4ZS01437	2011	2011
C-5	C-5	Caterpillar G3606 w/OC	1,775	4ZS01436	2011	2011
C-8	C-8	Waukesha L7042GSI w/CC	1,478	5283700857	2011	2011
C-9	C-9	Waukesha L7042GSI w/CC	1,478	5283700847	2011	2011
UTILITY-1	UTILITY-1	Waukesha F554G	139	149169	1967	1967

w/OC = with oxidation catalyst; w/CC = with catalytic converter.

Engine Data

EU	Source Make/Model/Name	Height Feet	Dia. Inches	Flow ACFM	Temp. °F	Fuel Consumption BTU/hp-hr	Fuel Consumption SCFH
C-1	Caterpillar G3608 w/OC*	22	20	15,911	878	6,781	16,024
C-2	Caterpillar G3608 w/OC*	22	20	15,911	878	6,781	16,024
C-3	Caterpillar G3608 w/OC*	22	20	15,911	878	6,781	16,024
C-4	Caterpillar G3606 w/OC*	22	20	11,971	867	6,781	12,036
C-5	Caterpillar G3606 w/OC*	22	20	11,971	867	6,781	12,036
C-8	Waukesha L7042GSI w/CC**	22	10	6,967	1,055	7,824	11,564
C-9	Waukesha L7042GSI w/CC**	22	10	6,967	1,055	7,424	11,564

**w/OC = with oxidation catalyst; **w/CC = with catalytic converter.*

EUG G-2 Heaters/Regenerators

EU	Point	Make/Model	(MMBTUH)	Const. Date
H-1654	H-1654	Hot Oil Heater (Devco)	21.6	2013

EUG G-3 Fugitives

EU	Number Items	Type of Equipment
F1-Gas	2,113	Valves
	7,448	Connectors/Flanges
	22	Compressor Seals
	127	Relief Valve
F2-Liquid	977	Valves
	2485	Connectors/Flanges
	12	Pump Seals

EUG G-4 Vents

EU	Point	Name	Const. Date
V-1	V-1	High Pressure Vent	<1972
V-2	V-2	Low Pressure Vent	<1972
V-3	V-3	Compressor Blowdown Vent	<1972
V-5	V-5	T-Building Vent	<1972

EUG G-5 Glycol Dehydration Unit Still Vent

EU	Point	Name	Const. Date
D-2	D-2	Glycol Dehy Unit Still Vent with Flash Tank	2013

EUG G-6 Loading

EU	Point	Name	Const. Date
F4-Condensate	F4-Condensate	Atmospheric condensate loading	2003
F8- Y-Grade	F8- Y-Grade	Y-grade NGLs loading	2003

EUG G-7 Tanks

EU	Name/Description	Contents	Barrels	Gallons	Const. Date
T-1	Propane Storage	Propane (Press.)	1,000	42,000	<1972
T-2	H.P. Condensate Tank	Condensate (Press.)	1,000	42,000	<1972
T-3	H.P. Condensate Tank	Condensate (Press.)	1,000	42,000	<1972
T-4	L.P. Condensate Tank	Condensate (Press.)	1,000	42,000	<1972
T-5	L.P. Condensate Tank	Condensate (Press.)	1,000	42,000	<1972
V-3911	Truck Receiving Tank3- Countyline	Condensate (Press.)	714	30,000	2003
V-3912	Truck Receiving Tank2- Countyline	Condensate (Press.)	714	30,000	2003
V-3913	Truck Receiving Tank1- Countyline	Condensate (Press.)	714	30,000	2003
V-3914	Not Connected. T/A Use Only	Propane (Press.)	714	30,000	2003
TK-1001	Glycol Storage	Glycol	80	3,360	<1972
TK-30	Hot Oil Storage	Heat Medium Oil	210	8,820	<1972
TK-31	Methanol Storage	Methanol	210	8,820	<1972
TK-1660	Hot Oil Storage	Heat Medium Oil	24	1,000	2013
TK-1662	Amine Storage	Amine	24	1,000	2013
TK-1664	TEG Storage	Glycol	24	1,000	2013
TK-5255	Used Motor Oil Storage	Used Motor Oil	12.5	535	2005
TNK-1*	API-North Oil Storage Tank	Condensate	300	12,600	2008
TNK-2*	API-South Oil Storage Tank	Condensate	300	12,600	2008
TK-19091	API-West Waste Water Storage Tank	Produced Water	300	12,600	2008
TK-19092	API-East Waste Water Storage Tank	Produced Water	300	12,600	2008
TK-1930	New Compression Slop Storage	Slop Oil	300	12,600	2011
TK-5252	Jacket Water Storage	Jacket Water	300	12,600	2011
TK-5251	Lube Oil Storage	Lube Oil	300	12,600	2011
TK-5250	Lube Oil Storage	Lube Oil	12	500	2012
TK-JACAM1	Chemical Storage	H2S Sulfide Tank	8	350	2012
TK-JACAM2	Chemical Storage	H2S Sulfide Tank	8	350	2012
TK-JACAM3	Chemical Storage	H2S Sulfide Tank	8	350	2012

EU	Name/Description	Contents	Barrels	Gallons	Const. Date
TK-9103	Chemical Storage	Scavenger	10	400	2012
S-19073	Oil Sump (North)	Oil	22	924	2008
S-19071	API Sump (Middle)	Separation Tank	24	1008	2008
S-19072	Waste Water Sump Tank (South)	Waste / Produced Water	22	924	2008
S-3907	Truck Rack Sump	Waste / Produced Water	22	924	2006

**Added an operating scenario to allow the transfer of condensate from the existing pressurized vessels to TNK-1 and TNK-2 through S-19071.*

EUG G-8 Amine Unit Still Vent

EU	Point	Name	Const. Date
A-1	A-1	Amine Unit Still Vent with Flash Tank	12/2013

EUG G-9 Combustion Devices

EU	Point	Name	Const. Date
TO-1	TO-1	Thermal Oxidizer	12/2013
FLARE-1	FLARE-1	Process Flare	12/2013

SECTION IV. EMISSIONS

- Emission estimates of NOx, CO, VOC, and formaldehyde (HCOH) from engines are based on continuous operation and manufacturer's emission factors, and NSPS Subpart JJJJ limits as listed in Table 1. Utility water pump engine (UTILITY-1) emissions factors are based on AP-42 (7/00), Table 3.2-3.

- Emission estimates for the heaters are based on continuous operation and AP-42 (7/98), Chapter 1.4.

- Emission estimates for the tanks are based on AP-42 (1/95), Chapter 7.1. Flashing emissions are based on a process simulation.

- Emissions from the amine unit still vent (A-1) are based on a natural gas liquids analysis, a flow rate of 75 MMscf/day, and a process simulation. The applicant conservatively used H_2S concentration of 4 ppmv. The amine unit still vent emissions are controlled by a thermal oxidizer (TO-1), or other control device with a control efficiency of 95% or higher. The amine unit is equipped with a flash tank which is routed to the low pressure gathering system.

- Emission estimates for the glycol regenerator still vent (D-2) are based a lean glycol recirculation rate of 10.8 gpm, a flow rate of 75 MMscf/day of inlet gas to the large contactor and a flow rate of 5 MMscf/day of regenerated mole sieve gas to the small contactor, and a process simulation. The dehydration unit still vent emissions are controlled by a thermal oxidizer (TO-1), or other control device with a control efficiency of 95% or higher. The dehydration unit is equipped with a flash tank which is routed to the low pressure gathering system.

- Fugitive VOC emissions are based on EPA's *1995 Protocol for Equipment Leak Emission Estimates* (EPA-453/R-95-017), estimates of the number of process components, and a representative gas analysis.

- Condensate Loading emissions are based on AP-42, Section 5.2 methodology. The emissions are based on 0.6 saturation factor, true vapor pressure of 6 psia, molecular weight of 66 lb/lb-mole, and temperature of 523^{o} R.

- Y-Grade loading VOC emissions are based on the size of the loading hose, loading 2,100 tank trucks per year, a vapor density of 0.758 lb VOC/ft^3, and a liquid density of 3.626 lb VOC/gal. Y-Grade Hose depressurization (B2) VOC emissions are based on the number of blowdowns/year.

Table 1 Engine Emission Factors

Engines	Description	NOx	CO	VOC	HCHO[†]
		(g/hp-hr)			
C-1 through C-3	2,370-hp Caterpillar G3608 w/OC*	1.0	2.0	0.6	0.12
C-4 and C-5	1,775-hp Caterpillar G3606 w/OC*	1.0	2.0	0.6	0.12
C-8 and C-9	1,478-hp Waukesha L7042GSI w/CC**	1.0	2.0	0.7	0.02
		(lb/MMBtu)			
UTILITY-1	139-hp Waukesha F554G, 4SRB, Uncontrolled	2.27	3.72	0.03	0.0205

**w/OC = with oxidation catalyst; **w/CC = with catalytic converter. [†]70% emission reduction taken for catalytic converter and oxidation catalyst emission controls.*

Table 2 Loading Emissions

Compound	lb/1000 Gal	gal/yr
Condensate (F4)	5.66	1,800,000
Y-Grade (F8)	0.15	18,900,000

Table 3 Amine Unit Emissions

Description	Inlet H_2S	Gas Throughput	Control Efficiency	Uncontrolled	Controlled	
				H_2S (lb/hr)	H_2S (lb/hr)	SO_2 (lb/hr)
Amine Unit	4 ppmv	75 MMscf/day	95%	1.12	0.06	2.01

Table 4 Facility-wide Emissions After Modifications

EU	Source Make/Model/Name	NO_X		CO		VOC	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
C-1	Caterpillar G3608 w/OC*	5.22	22.89	10.45	45.77	3.13	13.73
C-2	Caterpillar G3608 w/OC*	5.22	22.89	10.45	45.77	3.13	13.73
C-3	Caterpillar G3608 w/OC*	5.22	22.89	10.45	45.77	3.13	13.73
C-4	Caterpillar G3606 w/OC*	3.91	17.14	7.83	34.28	2.35	10.28
C-5	Caterpillar G3606 w/OC*	3.91	17.14	7.83	34.28	2.35	10.28
C-8	Waukesha L7042GSI w/CC**	3.26	14.27	6.52	28.54	2.28	9.99
C-9	Waukesha L7042GSI w/CC**	3.26	14.27	6.52	28.54	2.28	9.99
UTILITY-1	Waukesha F554G[†]	2.52	0.63	4.14	1.04	0.03	<0.01
TNK-1	Condensate Storage Tank[1]	----	----	----	----	----	3.94
TNK-2	Condensate Storage Tank[1]	----	----	----	----	----	3.94
S-19071	API Sump (Middle)[2]	----	----	----	----	----	9.14
S-19073	Oil Sump (North)[3]	---	---	---	---	---	1.33

EU	Source Make/Model/Name	NO_X		CO		VOC	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
S-19072	Waste Water Sump Tank (South)[3]	----	----	----	----	----	0.01
TK-19091	API-West Waste Water Storage Tank[1]	----	----	----	----	----	0.04
TK-19092	API-East Waste Water Storage Tank[1]	----	----	----	----	----	0.04
H-1654	Hot Oil Heater	2.12	9.28	1.78	7.79	0.12	0.51
D-2	Glycol Dehydrator Still Vent****	----	----	----	----	0.66	2.91
A-1	Amine Unit Vent****	----	----	----	----	0.12	0.53
TO-1	Thermal Oxidizer Burner Gas Emissions	0.68	2.96	0.57	2.49	0.04	0.16
FLARE-1	Process Flare Suppl. Fuel Gas Emissions	1.02	4.47	5.55	24.31	2.10	9.20
F1-Gas	Process Piping Fugitive (unmonitored)	----	----	----	----	1.64	7.19
F4-Condensate	Condensate Truck Loading	----	----	----	----	----	5.09
F5-HH	Process Piping Fugitive (NESHAP HH)	----	----	----	----	1.51	6.59
F6-KKK	Process Piping Fugitive (NSPS KKK)	----	----	----	----	2.07	9.07
F7-OOOO	Process Piping Fugitive (NSPS OOOO)	----	----	----	----	0.05	0.23
F8-Y-Grade	Y-Grade Loading (Countyline)	----	----	----	----	----	1.40
B1	Blowdown Emissions‡	----	----	----	----	----	4.55
B2	Y-Grade Hoses Depressurize Emissions	----	----	----	----	----	0.31
Total Emissions		**36.34**	**148.83**	**72.09**	**298.58**	**26.99**	**147.92**

**w/OC = with oxidation catalyst; **w/CC = with catalytic converter;*
[1] Working and breathing losses only;
[2] Working and flashing losses;
[3] Working losses – pass through vessel, no storage;
† based on 500 hours/year of operations;
‡VOC emissions from the vents (V-1, V-2, V-3, & V-5) are not estimated since the vents are used only in emergencies and for non-routine or upset conditions such as engine and compressor maintenance. Emissions from other storage tanks, of EUG G-7 (Tanks), are assumed negligible;
*****These emissions actually occur at one of the control devices, either the thermal oxidizer or the flare not at the actual amine or dehydrator still vents.*

Table 6 Formaldehyde Emissions from the Engines

			Factor	Uncontrolled Emissions		Controlled Emissions*	
EU	**Make/Model**	**hp**	**g/hp-hr**	**lb/hr**	**TPY**	**lb/hr**	**TPY**
C-1	Caterpillar G3608 w/OC	2,370	0.4	2.09	9.15	0.63	2.75
C-2	Caterpillar G3608 w/OC	2,370	0.4	2.09	9.15	0.63	2.75
C-3	Caterpillar G3608 w/OC	2,370	0.4	2.09	9.15	0.63	2.75
C-4	Caterpillar G3606 w/OC	1,775	0.4	1.57	6.86	0.47	2.06
C-5	Caterpillar G3606 w/OC	1,775	0.4	1.57	6.86	0.47	2.06
C-8	Waukesha L7042GSI w/CC	1,478	0.05	0.16	0.71	0.05	0.21
C-9	Waukesha L7042GSI w/CC	1,478	0.05	0.16	0.71	0.05	0.21
UTILITY-1	Waukesha F554G	139	0.0205†	<0.01	0.03	<0.01	0.03
Totals				**9.73**	**42.59**	**2.94**	**12.79**

**70% efficiency is assumed for oxidation catalysts (oc) and catalytic converters (cc). †emissions factor is in lb/MMBtu and no controls.*

Table 7 VOC and HAP Emissions from Glycol Dehydration Unit Still Vent

Pollutant	CAS #	Estimated Emissions	
		lb/hr	TPY
Benzene	71432	0.04	0.18
Toluene	108883	0.05	0.21
Ethyl benzene	100414	0.07	0.3
Xylene	1330207	Negl.	Negl.
n-Hexane	110543	0.08	0.34
Totals		**0.24**	**1.03**

Total formaldehyde controlled emissions from the engines (Table 6) are 12.79 TPY and total HAP emissions from the glycol dehydration unit (Table 7) are 1.03 TPY. The total HAP emissions are, therefore, 13.82 TPY. Formaldehyde emissions are 12.79 TPY, which is above the major source threshold of HAP emissions of 10 TPY. The facility is therefore a major source of HAP.

PSD Review

The facility is an existing major stationary source. The dehydration unit (D-2) is subject to 95% or more control requirements under NESHAP Subpart HH. Therefore controlled VOC emissions are used in the analysis. The facility has historically been treating sweet natural gas (H_2S < 4 ppmv). Recent analysis of the inlet gas to this facility showed negligible (~0.7 ppmv) hydrogen sulfide content. Conservatively, with 4 ppmv of H_2S at the inlet and 75 MMscf/day (design capacity) gas throughput, and assuming 100% conversion of H_2S to SO_2 by oxidation, it will yield 2.11 lb/hr and 9.24 tpy of SO_2, which is below the PSD significance level of 40 tpy. The uncontrolled VOC emissions from the amine unit are used in this analysis.

In October 2016, DCP submitted updated information in accordance with OAC 252:100-8-5(b) for the thermal oxidizer (TO-1) to correct the heat input and corresponding emissions. The heat input was incorrectly listed at 3.0 MMBtu/hr instead of 6.9 MMBtu/hr. In addition, the applicant has requested additional emissions for an "insignificant" maintenance activity associated with Y-Grade offloading authorized, identifying the source as B2. An updated PSD evaluation of project increases was provided at that time which is shown in Table 8 below.

The project did not result in any debottlenecking and the gas throughput remained unchanged at 75 MMscf/day. Therefore, no "associated emissions" increase was expected from the existing units.

Project emissions increases, as addressed in Permit No. 2011-064-TVR2 (M-1), are shown in Table 8 below. The table demonstrates that the project emissions increases are below the PSD significance threshold and therefore no further review is required.

Table 8: Project Increase Only - PSD Applicability Analysis

Emissions Source	NO_x	CO	VOC
	TPY	TPY	TPY
Hot Oil Heater (H-1654)	9.28	7.79	0.51
Thermal Oxidizer (TO-1)	2.96	2.49	0.16
Process Flare (FLARE-1)	4.47	24.31	9.20
Controlled Dehydration Unit (TO-1 & FLARE-1)	--	--	2.91
Uncontrolled Amine Unit	--	--	10.60
Uncontrolled Fugitives (F7-OOOO)	--	--	7.78
Y-Grade Hoses Depressurize Emissions (B2)	--	--	0.31
Total Increase (TPY) =	**16.71**	**34.59**	**31.47**
PSD Threshold	**40**	**100**	**40**
Greater than PSD Threshold	**No**	**No**	**No**

SECTION V. INSIGNIFICANT ACTIVITIES

The insignificant activities identified and justified in the application are duplicated below. Records are available to confirm the insignificance of the activities. Appropriate recordkeeping of activities indicated below with "*" is specified in the Specific Conditions.

1. Space heaters, boilers, process heaters, and emergency flares less than or equal to 5 MMBTUH heat input (commercial natural gas). There are space heaters on-site which are rated less than 5 MMBTUH. Other space heaters, boilers, process heaters, and emergency flares may be used in the future.
2. Emissions from crude oil or condensate marine and truck loading equipment operations at crude oil and natural gas production sites where the loading rate does not exceed 10,000 gallons per day averaged over a 30-day period. Unloading of the condensate into tank trucks is less than 10,000 gallons/day.
3. * Emissions from crude oil and condensate storage tanks with a capacity of less than or equal to 420,000 gallons that store crude oil and condensate prior to custody transfer as defined by Subpart Kb. The three condensate tanks store condensate prior to custody transfer and have capacities less than 420,000 gallons.
4. * Emissions from storage tanks constructed with a capacity less than 39,894 gallons which store VOC with a vapor pressure less than 1.5 psia at maximum storage temperature. The glycol, lube oil, waste oil, antifreeze, diesel, and waste water tanks have capacities less than 39,894 gallons and store products having a vapor pressure less than 1.5 psia.
5. Cold degreasing operations utilizing solvents that are denser than air. A parts washer is located on-site and it uses solvents that are denser than air and others may be used in the future.
6. * Activities that have the potential to emit no more than 5 TPY (actual) of any criteria pollutant. Sump tanks (S-19072 and S-19073) and storage tanks (TK-19091 and TK-19092) are in this category. This type of activities may also be used and identified in the future.

SECTION VI. OKLAHOMA AIR POLLUTION CONTROL RULES

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

OAC 252:100-2 (Incorporation by Reference) [Applicable]
This subchapter incorporates by reference applicable provisions of Title 40 of the Code of Federal Regulations. These requirements are addressed in the "Federal Regulations" section.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]
Primary Standards are in Appendix E and Secondary Standards are in Appendix F of the Air Pollution Control Rules. At this time, all of Oklahoma is in attainment of these standards.

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

OAC 252:100-8 (Permits for Part 70 Source) [Applicable]
This facility meets the definition of a major stationary source since it emits regulated pollutants in excess of 250 TPY. NSR was not required for this "grandfathered" facility. A Part 70 operating 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, to which a state or federal requirement does not apply, that either are on the list in Appendix I (OAC 252:100), or whose actual calendar year emissions do not exceed the following limits:

a. 5 TPY of any one criteria pollutant
b. 2 TPY of any one hazardous air pollutant (HAP) or 5 TPY of multiple HAP or 20% of any threshold less than 10 TPY for any 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 affirmative defense, 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]
This subchapter specifies a particulate matter (PM) emissions limitation of 0.6 lb/MMBTU from indirect fired fuel-burning units with a rated heat input of 10 MMBTUH or less. Fuel-burning equipment with a rated heat input between 10 to 100 MMBTUH is limited to between 0.599 and 0.33 lb/MMBTU, as defined in Appendix C. For 2-cycle and 4-cycle lean burn engines burning natural gas, AP-42 (7/00), Table 3.2-1 and 3.2-2 list the total PM emissions as 0.05 lb/MMBTU and 0.01 lb/MMBTU, respectively. The permit requires the use of natural gas for all fuel-burning equipment to ensure compliance with Subchapter 19. Since only natural gas is burned at the facility, compliance with the standard is assured without any special monitoring provisions.

Equipment	Maximum Heat Input, (MMBTUH)	Appendix C Emission Limit, (lbs/MMBTU)	Potential Emission Rate, (lbs/MMBTU)
Heater (H-1654)	21.6	0.50	0.0053

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

OAC 252:100-25 (Visible Emissions and Particulate Matter) [Applicable]
No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. When burning natural gas there is little possibility of exceeding the opacity standards.

OAC 252:100-29 (Fugitive Dust) [Applicable]
No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. Under normal operating conditions, this facility will not cause a problem in this area, therefore it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds) [Applicable]
Part 2, Section 31-7 limits the ambient air impact of hydrogen sulfide (H_2S) emissions from any facility to 0.2 ppmv at standard conditions (24-hour average) which is equivalent to 283 $\mu g/m^3$.
An analysis of the inlet gas to this facility showed negligible (0.7 ppmv) hydrogen sulfide content. AQD has determined with modeling, for a facility with fuel combustion equipment at 343 ppmv, condensate at 135 ppmw, and amine unit with 4 ppmv of H_2S, the facility is in compliance with this subpart.
Part 5 limits sulfur dioxide emissions from new petroleum or natural gas process equipment (constructed after July 1, 1972). For gaseous fuels the limit is 0.2 lb/MMBTU heat input averaged over 3 hours. For fuel gas having a gross calorific value of 1,000 Btu/SCF, this limit corresponds to fuel sulfur content of 1,203 ppmv. Gas produced from oil and gas wells having 343 ppmv or less total sulfur will ensure compliance with Subchapter 31. The permit requires

the use of pipeline-grade natural gas or field gas with a maximum sulfur content of 343 ppmv for all fuel-burning equipment to ensure compliance with Subchapter 31.

Part 5, Section 31-26(1) also limits hydrogen sulfide emissions from new petroleum or natural gas process equipment (constructed after July 1, 1972). Removal of hydrogen sulfide (H_2S) in the exhaust stream shall be reduced by 95% by removal or by being oxidized to SO_2, unless H_2S emissions would be less than 0.3 lb/hr for a two-hour average. The amine unit is used to remove CO_2 and any H_2S from the sweet NGL liquids. Conservatively, with 4 ppmv of H_2S at the inlet with 75 MMscf/day gas throughput will yield approximately 1.12 lb/hr of uncontrolled H_2S at the exhaust. The amine unit still vent emissions at this facility are controlled by a thermal oxidizer, or other control device with a control efficiency of 95% or higher, and is therefore in compliance with this part.

Part 5, Section 31-26(2) requires removal or oxidation of hydrogen sulfide (H_2S) from the exhaust gas of any new petroleum or natural gas process equipment. This part allows direct oxidation of H_2S to sulfur dioxide (SO_2), without sulfur recovery, when the acid gas stream will contain no more than 0.54 long tons per day (LT/D) of sulfur (S). At 4 ppmv of H_2S and 75 MMscf/day gas throughput, the sulfur content of the exhaust gas stream would be 0.011 LT/D, which is less than the de minimis (0.54 LT/D) for use of a sulfur recovery unit. The facility is therefore exempt from this requirement.

OAC 252:100-33 (Nitrogen Oxides) [Not Applicable]

None of the units exceed the 50 MMBTU/hr threshold for fuel combustion and therefore are not applicable to this subchapter.

OAC 252:100-35 (Carbon Monoxide) [Not Applicable]

None of the affected processes are located at this facility: gray iron cupola, blast furnace, basic oxygen furnace, petroleum catalytic cracking, 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 of 400 gallons or more and storing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. All of the tanks at the facility were constructed prior to this rule, except for two new condensate tanks (TNK-1 and TNK-2) and a sump tank (S-19071) which are subject.

Part 3 requires VOC loading facilities with a throughput equal to or less than 40,000 gallons per day to be equipped with a system for submerged filling of tank trucks or trailers if the capacity of the vehicle is greater than 200 gallons. This facility has a loading rack for loading of natural gas liquids (propane and butane) and natural gasoline. The system was installed prior to the effective date of this rule.

Part 5 limits the VOC content of coatings used in coating lines or operations. This facility does not normally conduct coating or painting operations except for routine maintenance of the facility and equipment which is exempt.

Part 7 requires fuel-burning equipment to be operated and maintained so as to minimize emissions. Temperature and available air must be sufficient to provide essentially complete combustion.

Part 7 requires all effluent water separator openings, which receive water containing more than 200 gallons per day of any VOC, to be sealed or the separator to be equipped with an external floating roof or a fixed roof with an internal floating roof or a vapor recovery system. There are no effluent water separators located at this facility.

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

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

The following Oklahoma Air 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 source category

SECTION VII. FEDERAL REGULATIONS

PSD, 40 CFR Part 52 [Applicable]

Total potential emissions of CO are greater than the PSD threshold of 250 TPY. Any future emission increases must be evaluated for PSD, if they exceed a significance level (40 TPY NO_X, 100 TPY CO, and 40 TPY VOC).

NSPS, 40 CFR Part 60 [Subparts Dc, KKK, JJJJ, and OOOO Applicable]

Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units. This subpart affects steam generating units with design heat input capacities between 10 and 100 MMBTUH for which construction, reconstruction, or modification commenced after June 9, 1989. Heater H-1654 was constructed after 1989 and is used to heat oil, which is then used in different processes. Therefore, this heater meets the definition of steam generating unit. Since the heater is fired with natural gas it is only required to meet the recordkeeping requirement of § 60.48c (g) which requires records of the amount of fuel combusted each month.

Subparts K, Ka, Kb, VOL Storage Vessels. The old condensate tanks at the site are not subject because they were constructed prior to the effective dates of these standards and they store condensate prior to custody transfer as defined by Subpart Kb. The condensate is produced prior to processing by the plant. The new condensate tanks (TNK-1 and TNK-2) and a sump tank (S-19071) are not subject to Kb since their capacities are less than the smallest threshold level (19,813 gallons) of this subpart.

Subpart GG, Stationary Gas Turbines. There are none at this facility.

Subpart VV, Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry. The equipment is not in a SOCMI plant but the facility is applicable to Subpart KKK which references some of the standards of Subpart VV.

Subpart KKK, Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. This subpart applies to natural gas processing plants that commence construction, reconstruction, or modification after January 20, 1984. This subpart sets standards for natural gas processing plants which are defined as any site engaged in the extraction of natural gas liquids from field gas, fractionation of natural gas liquids, or both. This facility not only extracts natural gas liquids from field gas but it also fractionates the natural gas liquids. The majority of the facility is exempt from this subpart based on construction prior to the applicable effective date. The propane refrigeration unit, inlet processing and storage unit, hot oil process unit, vapor recovery unit, and product storage unit are subject to this subpart and all applicable requirements. The permit will require compliance for these emission units and all related components.

Subpart LLL, Onshore Natural Gas Processing: SO_2 Emissions. This subpart affects sweetening units and sweetening units which commence construction or modification after January 20, 1984 and prior to August 23, 2011. The facility has a sweetening unit, however it was constructed after August 23, 2011, and is not subject to this regulation.

Subpart IIII, Stationary Compression Ignition Internal Combustion Engines. This subpart affects stationary compression ignition (CI) internal combustion engines (ICE) based on power and displacement ratings, depending on date of construction, beginning with those constructed after July 11, 2005. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. There are no compression ignition engines located at this facility.

Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines (SI-ICE). This subpart was published in the Federal Register on January 18, 2008. It promulgates emission standards for new SI engines ordered after June 12, 2006, that are manufactured after certain dates, and for all

SI engines modified or reconstructed after June 12, 2006, regardless of size. The specific emission standards (either in g/hp-hr or as a concentration limit) vary based on engine class, engine power rating, lean-burn or rich-burn, fuel type, duty (emergency or non-emergency), and manufacture date.

The owner/operator of a stationary SI-ICE with a maximum engine power greater than or equal to 100-hp must comply with the emission standards in Table 1 of Subpart JJJJ.

Emission Standards from Table 1, Subpart JJJJ, g/hp-hr (ppmvd @ 15%O_2)
For Non-Emergency SI Lean-Burn Engines Burning Natural Gas

Rated Power (hp)	Mfg. Date	NO_X	CO	VOC
hp $\geq$ 1,350	7/1/2007	2.0 (160)	4.0 (540)	1.0 (86)
hp $\geq$ 1,350	7/1/2010	1.0 (82)	2.0 (270)	0.7 (60)

Engine manufacturers are required to certify certain engines to meet the emission standards and may voluntarily certify other engines. An initial notification is required only for owners and operators of engines greater than 500 HP that are non-certified. If the engine is certified, the owner/operator may meet the CO certification (not field testing) standard for which the engine was certified. Any engine ordered after June 12, 2006 and manufactured after July 1, 2007 (for an engine more than 1,350-hp) or after January 1, 2008 (for an engine less than 1,350 HP) or after July 1, 2008 (for an engine power less than 500 HP) will be subject to this subpart. The engines C-1 through C-5, C-8, and C-9 were ordered after June 12, 2006, and manufactured after July 1, 2007; therefore, the standards under this subpart apply. UTILITY-1 was manufactured before June 12, 2006, and is not subject to this subpart.

Subpart OOOO, Crude Oil and Natural Gas Production, Transmission, and Distribution. This subpart was promulgated on August 16, 2012, and per §60.5365 affects the following onshore affected facilities that commence construction, reconstruction, or modification after August 23, 2011, and on or before September 18, 2015:

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

5. Each storage vessel affected facility, which is a single storage vessel located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment, and has the potential for VOC emissions ≥ 6 TPY. Storage vessel means a tank or other vessel that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water.
6. The group of all equipment, except compressors, within a process unit is an affected facility.
    i. Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.
    ii. Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§ 60.5400, 60.5401, 60.5402, 60.5421, and 60.5422 if it is located at an onshore natural gas processing plant.
7. Sweetening units located at onshore natural gas processing plants that process natural gas produced from either onshore or offshore wells.
    i. Each sweetening unit that processes natural gas is an affected facility; and
    ii. Each sweetening unit that processes natural gas followed by a sulfur recovery unit is an affected facility.
    iii. Facilities that have a design capacity less than 2 long tons per day (LT/D) of hydrogen sulfide (H_2S) in the acid gas (expressed as sulfur) are required to comply with recordkeeping and reporting requirements specified in §60.5423I but are not required to comply with §§60.5405 through 60.5407 and §§60.5410(g) and 60.5415(g) of this subpart.

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

For each reciprocating compressor the owner/operator must replace the rod packing before 26,000 hours of operation or prior to 36 months. If utilizing the number of hours, the hours of operation must be continuously monitored. The compressors associated with engines C-1 through C-5, C-8, and C-9 were constructed prior to August 23, 2011; therefore, they are not subject to the requirements of this subpart.

Pneumatic controllers at a natural gas processing plant must have a bleed rate of zero. All new pneumatic controllers at this facility will have to comply with this subpart.

Storage vessels constructed, modified or reconstructed after August 23, 2011**,** with VOC emissions equal to or greater than 6 TPY must reduce VOC emissions by 95.0 % or greater. Storage tanks, TNK-1, TNK-2, and S-19071 were constructed before August 23, 2011. All other tanks are insignificant activities with negligible emissions. The storage tanks are therefore not subject to this subpart.

The group of all equipment, except compressors, within a process unit at a natural gas processing plant must comply with the requirements of NSPS, Subpart VVa, except as provided in §60.5401. All process units (except 82 Treating, Area 01 Inlet Handling, Area 02 Inlet Gas and Compression) are considered existing and are not subject to this subpart. Those three process units will have to comply with this subpart.

A sweetening unit means a process device that removes hydrogen sulfide and/or carbon dioxide from the sour natural gas stream. A sour natural gas stream is defined as containing greater than or equal to 0.25 grains sulfur per 100 standard cubic feet or 4 ppmv. The natural gas stream at Sholem does not contain greater than 0.25 grains sulfur per 100 standard cubic feet or 4 ppmv, therefore the facility does not treat a sour natural gas stream. The amine unit is therefore not subject to this subpart.

All applicable requirements have been incorporated into the permit.

Subpart OOOOa, Crude Oil and Natural Gas Production, Transmission, and Distribution. This subpart was published in the Federal Register on June 3, 2016, with an effective date of August 3, 2016. This subpart regulates equipment at crude oil and natural gas production, transmission and distribution facilities that commenced construction, reconstruction, or modification after September 18, 2015. This subpart regulates single well heads, centrifugal and reciprocating compressors, single continuous bleed natural gas driven pneumatic controllers with a natural gas bleed rate greater than 6 SCFH, storage vessels with the potential for VOC emissions greater than 6 TPY after federally enforceable conditions, onshore natural gas processing plants, sweetening units, single natural gas driven pneumatic diaphragm pumps located at onshore natural gas processing plants, and fugitive emission components located at a compressor station. All equipment at the facility commenced construction prior to this applicability date, therefore is not subject to this subpart.

NESHAP, 40 CFR Part 61 [Not Applicable]
There are no emissions of any of the regulated pollutants: arsenic, asbestos, beryllium, benzene, coke oven emissions, mercury, radionuclides or vinyl chloride except for trace amounts of benzene. Subpart J, Equipment Leaks of Benzene only affects process streams which contain more than 10% benzene by weight. All process streams at this facility are below this threshold.

NESHAP, 40 CFR Part 63 [Subparts HH, ZZZZ, and DDDDD are Applicable]
Subpart HH, Oil and Natural Gas Production Facilities. This subpart applies to affected emission points that are located at facilities that are major sources of HAPs and either process, upgrade, or store hydrocarbons prior to the point of custody transfer or prior to which the natural gas enters the natural gas transmission and storage source category. Based on emissions calculated in the "Emissions" section this facility is a major source of HAPs and is subject to the provisions of this subpart. Subpart HH affects glycol dehydration units, storage vessels with the potential for flash emissions (which are defined to include only those vessels with a daily throughput of 21,000 gallons), and compressors and ancillary equipment (valves, flanges, etc.) in VHAP service (i.e., contacting greater than 10% by weight VHAP) that are located at gas plants. The facility complies with Subpart HH by venting dehydration unit off-gases to a thermal oxidizer or a flare with 95% or better destruction efficiency. The storage vessels do not have enough throughput to be considered storage vessels with the potential for flash emissions and are not subject to the requirements of this subpart. The compressors and ancillary equipment in VHAP service are subject to the monitoring and recordkeeping requirements of this subpart. The permit will require compliance with the applicable requirements of this subpart.
Subpart EEEE, Organic Liquids Distribution (Non-Gasoline). This subpart affects organic liquid distribution (OLD) operations at major sources of HAPs with an organic liquid throughput greater than 7.29 million gallons per year (173,571 barrels/yr). This facility is a major source but

the facility's potential throughput is estimated at 3.69 million gallons per year (87,877 barrels/year) and is not subject to this regulation.

Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE). This subpart affects any existing, new, or reconstructed stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand. The following table differentiates existing, new, or reconstructed units based on their construction dates.

	Construction/Reconstruction Dates	
	Engines >500 hp	**Engines ≤ 500hp**
Existing Unit		
Located at Major HAP Source	Before 12/19/02	Before 6/12/06
Located at Area HAP Source	Before 6/12/06	
New or Reconstructed Unit		
Located at Major HAP Source	On and After 12/19/02	On and After 6/12/06
Located at Area HAP Source	On and After 6/12/06	

The engines C-1 through C-5, C-8, and C-9 are new units and located at a major source of HAPs and shall comply with applicable emission limitations and operating limitations of this subpart.

Initial performance test or other initial compliance demonstration according to Tables 4 and 5 to this subpart have been conducted within 180 days after the compliance date. Specific requirements in §63.6600 are listed in the following table.

Engine Category	**Requirements From Subpart ZZZZ of Part 63**
New, and Reconstructed SI, 4SRB Stationary RICE > 500 HP Located at a Major Source of HAP Emissions	Reduce formaldehyde emissions by 76 percent, or Limit concentration of formaldehyde to 350 ppbvd @ 15% O_2.
New, and Reconstructed SI, 4SLB Stationary RICE > 500 HP Located at a Major Source of HAP Emissions	Reduce CO emissions by 93 percent, or Limit concentration of formaldehyde to 14 ppmvd @ 15% O_2.

The emergency engine (UTILITY-1) is an existing stationary SI RICE located at a major source of HAP and smaller than 500 HP, subject to the requirements as "emergency stationary RICE." On January 13, 2013, EPA finalized the requirements for stationary SI RICE.

Engine Category	**Normal Operation**
Emergency SI RICE	1. Change oil and filter every 500 hours of operation or annually, whichever comes first, and replace as necessary. 2. Inspect spark plugs every 1,000 hours of operation or annual, whichever comes first, and replace as necessary. 3. Inspect all belts and hoses every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[1] *During Startup - Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.*

Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters at major sources of HAPs. Subpart DDDDD was published in the Federal Register on January 31, 2013. This facility is a major source of HAPs; therefore, is subject to this subpart.

Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources of HAPs. As per §63.11195 (e) gas-fired boilers are not subject to this subpart. Gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year. The boilers at this facility meet the definition of gas fired boilers and are not subject to this subpart.

Compliance Assurance Monitoring, 40 CFR Part 64 [Not Applicable]
Compliance Assurance Monitoring, as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit at a major source that is required to obtain a Title V permit, if it meets all of the following criteria:

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

The engines C-1 through C-5, C-8, and C-9 are new units and subject to NSPS Subpart JJJJ and Subpart ZZZZ. Therefore, they are not subject to the requirements of this subpart.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Applicable]
This facility handles naturally occurring hydrocarbon mixtures at a natural gas processing plant and the Accidental Release Prevention Provisions are applicable to this facility. The facility was required to submit the appropriate accidental release emergency response program plan prior to June 21, 1999. More information on this federal program is available on the web page: *www.epa.gov/ceppo*.

Stratospheric Ozone Protection, 40 CFR Part 82 [Subparts A and F are 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 in §82.156 for persons opening appliances for maintenance, service, repair, or disposal; §82.158 for equipment used during the maintenance, service, repair, or disposal of appliances; §82.161 for certification by an approved technician certification program of persons performing maintenance, service, repair, or disposal of appliances; §82.166 for recordkeeping; § 82.158 for leak repair requirements; and §82.166 for refrigerant purchase records for appliances normally containing 50 or more pounds of refrigerant.

SECTION VIII. COMPLIANCE

Tier Classification and Public Review

This application has been determined to be a **Tier II** based on being a request for a renewal of an operating permit for a facility that is currently permitted as a major source of emissions. The permittee has submitted an affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certifies that the applicant owns the land. Information on all permit actions is available on the Air Quality section of the DEQ web page at *www.deq.state.ok.us*.

The applicant will publish the "Notice of Filing a Tier II Application" and the "Notice of Tier II Draft Permit" in a local newspaper in Stephens County. The notices will state that the application and the draft permit can be reviewed at the local Public Library. The notices will also state that the application and the draft permit will be available for public review at the AQD main office in Oklahoma City and on the DEQ web page at *http://www.deq.state.ok.us*. This facility is located within 50 miles of the Oklahoma - Texas border. The state of Texas will be notified of the draft permit.

Test Results

The quarterly test results of the engines emissions are as shown below:

EU ID #	Permit Limits		Test Results		
	NOx	CO	NOx	CO	Date
	lb/hr	lb/hr	lb/hr	lb/hr	
C1	3.66	10.45	1.94	0.11	12/21/2016
C2	3.66	10.45	1.57	0.17	12/21/2016
C3	3.66	10.45	1.67	0.17	12/21/2016
C4	2.74	7.83	0.99	0.75	12/21/2016
C5	2.74	7.83	1.00	0.42	12/21/2016
C8	3.26	6.52	1.41	0.31	12/21/2016
C9	3.26	6.52	1.05	0.25	12/21/2016

Inspection

A FCE was conducted at DCP-Sholem on January 28, 2015. Alex McCumber, Camas Frey, and Jenn McCutcheon, Environmental Programs Specialists with the Air Quality Division conducted the evaluation for the Air Quality Division. Jay Laughlin, Environmental Specialist represented DCP-Sholem. During the evaluation the specific conditions of permits 2011-064-TVR2, 2006-041-TVR (M-1), and 2006-041-C (M-1) were reviewed, records were requested, and a tour of Sholem was conducted. Emission points were verified during the evaluation. Details of the inspection have been documented in the Full Compliance Evaluation Memorandum No. 06879.

Fees Paid

A fee of $7,500 has been paid for a renewal of a Part 70 permit.

SECTION IX. SUMMARY

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

DRAFT

PERMIT TO OPERATE
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS

DCP Operating Company, LP **Permit Number 2011-064-TVR2 (M-1)**
Sholem Gas Plant

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on February 4, 2016. The Evaluation Memorandum dated April 5, 2017, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein:

1. Points of emissions and emissions limitations for each point: [OAC 252:100-8-6(a)(1)]

EUG G-1: Emission limits for EUs C-1 through C-5, C-8, and C-9.

EU ID#	Description	NO_X		CO		VOC	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
C-1	Caterpillar G3608 w/OC*	5.22	22.89	10.45	45.77	3.13	13.73
C-2	Caterpillar G3608 w/OC*	5.22	22.89	10.45	45.77	3.13	13.73
C-3	Caterpillar G3608 w/OC*	5.22	22.89	10.45	45.77	3.13	13.73
C-4	Caterpillar G3606 w/OC*	3.91	17.14	7.83	34.28	2.35	10.28
C-5	Caterpillar G3606 w/OC*	3.91	17.14	7.83	34.28	2.35	10.28
C-8	Waukesha L7042GSI w/CC**	3.26	14.27	6.52	28.54	2.28	9.99
C-9	Waukesha L7042GSI w/CC**	3.26	14.27	6.52	28.54	2.28	9.99
UTILITY-1	Waukesha F554G	2.52	0.63	4.14	1.04	0.03	<0.01

**w/OC = with oxidation catalyst; **w/CC = with catalytic converter.*

(a) The engines C-1 through C-5 shall each be set to operate with the exhaust gases passing through a properly functioning oxidation catalyst.
(b) The engines C-8 and C-9 shall each be set to operate with the exhaust gases passing through a properly functioning catalytic converter.
(c) The engine for the emergency utility water pump (UTILITY-1) shall run no more than 500 hours/year, out of which 100 hours in non-emergency service. The engine shall comply with NESHAP Subpart ZZZZ.
(d) The engine for the emergency utility water pump (UTILITY-1) shall be equipped with non-resettable hour meter.
(e) Engines C-1 through C-5, C-8, and C-9 shall comply with NSPS Subpart JJJJ and NESHAP Subpart ZZZZ.

EUG G-2: Emissions from EUs H-1654 are based on the rated heat capacity of the heaters and are limited to the listed heat rating.

EU	Make/Model	MMBTUH
H-1654	Hot Oil Heater (Devco)	21.6

EU ID #	Source Make/Model/Name	NO_X		CO		VOC	
		lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
H-1654	Hot Oil Heater	2.12	9.28	1.78	7.79	0.12	0.51

(a) Heater H-1654 is subject to NSPS, Subpart Dc and shall comply with all applicable requirements. [40 CFR 60.40c to 60.48c]
  (1) The permittee shall record and maintain records of the amounts of each fuel combusted each month. [§ 60.48c (g)(2)]

(b) Heater H-1654 is subject to NESHAP, Subpart DDDDD and shall comply with all applicable requirements. [40 CFR 63.7480 to 63.7575]

EUG G-3: Emissions from the fugitive equipment leaks are based on an estimated component count and a recent gas analysis. There are no limits applied to these EUs. Some of the individual components are "grandfathered."

EU	Number Items	Type of Equipment
F1-Gas	2,113	Valves
	7,448	Connectors/Flanges
	22	Compressor Seals
	127	Relief Valve
F2-Liquid	977	Valves
	2485	Connectors/Flanges
	12	Pump Seals

EUG G-4: EUs V-1, V-2, V-3, and V-5 are "grandfathered" (constructed prior to any applicable rule). There are no emissions limits applied to these units under Title V.

EU	Point	Name
V-1	V-1	High Pressure Vent
V-2	V-2	Low Pressure Vent
V-3	V-3	Compressor Blowdown Vent
V-5	V-5	T-Building Vent

EUG G-5: Emissions from EU D-2, the glycol dehydration unit still vent, are based on a gas analysis and an estimate of the amount of gas throughput. Emission limits are for the glycol dehydration unit's still vent.

EU	Point	Name
D-2	D-2	Glycol Dehydration Unit Still Vent with Flash Tank

Emission Limits for D-2		
	lb/hr	TPY
VOC	0.66	2.91

(a) The lean glycol recirculation rate of the glycol dehydration unit shall not exceed 10.8 gallons per minute.

(b) The natural gas throughput of the large contactor glycol dehydration unit shall not exceed 75 MMSCFD based on a monthly average.

(c) The natural gas throughput of the small contactor glycol dehydration unit shall not exceed 5 MMSCFD based on a monthly average.
(d) The flash tank emissions shall be routed back to the low pressure gathering system.
(e) The dehydration unit is subject to NESHAP Subpart HH.
(f) The still vent emissions shall be routed to the thermal oxidizer or to the flare.

EUG G-6: Emissions for F4-Condensate are based on AP-42, Chapter 5 emissions factors and Condensate RVP10. Emissions for F8-Y-Grade loadings are based on an estimated number of loads and the size of the loading pipe and are considered insignificant.

EU	Point	Name
F4-Condensate	F4-Condensate	Atmospheric condensate loading
F8- Y-Grade	F8- Y-Grade	Y-grade NGLs loading

EUG G-7: Storage tanks with a construction date indicated as < 1972 are "grandfathered" (constructed prior to any applicable rule) and no emission limits applied to the "grandfathered" tanks under Title V. The remaining tanks (those constructed after 1972) are not "grandfathered", but emissions from these tanks are considered insignificant.

EU	Name/Description	Contents	Barrels	Gallons	Const. Date
T-1	Propane Storage	Propane (Press.)	1,000	42,000	<1972
T-2	H.P. Condensate Tank	Condensate (Press.)	1,000	42,000	<1972
T-3	H.P. Condensate Tank	Condensate (Press.)	1,000	42,000	<1972
T-4	L.P. Condensate Tank	Condensate (Press.)	1,000	42,000	<1972
T-5	L.P. Condensate Tank	Condensate (Press.)	1,000	42,000	<1972
V-3911	Truck Receiving Tank3- Countyline	Condensate (Press.)	714	30,000	2003
V-3912	Truck Receiving Tank2- Countyline	Condensate (Press.)	714	30,000	2003
V-3913	Truck Receiving Tank1- Countyline	Condensate (Press.)	714	30,000	2003
V-3914	Not Connected. T/A Use Only	Propane (Press.)	714	30,000	2003
TK-1001	Glycol Storage	Glycol	80	3,360	<1972
TK-30	Hot Oil Storage	Heat Medium Oil	210	8,820	<1972
TK-31	Methanol Storage	Methanol	210	8,820	<1972
TK-5255	Used Motor Oil Storage	Used Motor Oil	12.5	535	2005
TNK-1	API-North Oil Storage Tank	Condensate*	300	12,600	2008
TNK-2	API-South Oil Storage Tank	Condensate*	300	12,600	2008
TK-19091	API-West Waste Water Storage Tank	Produced Water	300	12,600	2008
TK-19092	API-East Waste Water Storage Tank	Produced Water	300	12,600	2008
TK-1930	New Compression Slop Storage	Slop Oil	300	12,600	2011
TK-5252	Jacket Water Storage	Jacket Water	300	12,600	2011
TK-5251	Lube Oil Storage	Lube Oil	300	12,600	2011
TK-5250	Lube Oil Storage	Lube Oil	12	500	2012
TK-8000	Chemical Storage	H2S Sulfide Tank	12	500	2012
S-19073	Oil Sump (North)	Oil	22	924	2008
S-19071	API Sump (Middle)	Separation Tank	24	1008	2008
S-19072	Waste Water Sump Tank (South)	Waste / Produced Water	22	924	2008
S-3907	Truck Rack Sump	Waste / Produced Water	22	924	2006

**Added an operating scenario to allow the transfer of condensate from the existing pressurized vessels to TNK-1 and TNK-2 through S-19071.*

TNK-1, TNK-2, and S-19071 are not "grandfathered" and the emissions from these tanks are as follows.

EU ID #	Description	VOC	
		lb/hr	TPY
TNK-1[1]	Condensate Storage Tank	---	3.94
TNK-2[1]	Condensate Storage Tank	---	3.94
S-19071[2]	Condensate Sump	---	9.14

[1] Working and breathing losses only; [2] Working and flashing losses;

(a) The condensate storage tanks TNK-1, TNK-2, and S-19071 shall be operated with submerged fill pipes.
(b) The facility shall be allowed to transfer the condensate from the existing pressurized vessels to TNK-1 and TNK-2 through S-19071 (condensate sump tank). The facility shall not exceed 1,800,000 gallons of condensate transfer under this scenario for both tanks combined in any 12-month period.
(c) Liquids from the water legs of pressurized vessels are routed through S-19071 prior to being pumped to TNK-1 and TNK-2 if hydrocarbon, or to TK-19091 and TK-19092 if water.

EUG G-8: Amine Unit

Emissions from EU A-1 are based on a natural gas throughput of 75 MMscf/day.

EU	Point	Stack/Vent
A-1	A-1	Amine Unit Still Vent with Flash Tank

Emission Limits for A-1	Units	Limits
VOCs	**lb/hr**	0.12
	TPY	0.53
H_2S	**lb/hr**	0.06

(a) The natural gas throughput shall not exceed 75 MMscf/day.
(b) The facility inlet natural gas H_2S content shall not exceed 4 ppmv.
(c) Stain tubes (or an equivalent method) shall be used to measure H_2S concentration with a first scale mark no larger than 1 ppmv.
(d) The off-gases from the amine unit's flash tank shall be routed to the low pressure gathering system.
(e) The amine regeneration vent emissions shall be routed to the thermal oxidizer or to the flare.

2. The fuel-burning equipment shall use pipeline-grade natural gas or field gas with a maximum sulfur content of 343 ppmv. Compliance can be shown by the following methods: for pipeline grade natural gas, a current gas company bill; for other gaseous fuel, a current lab analysis, stain-tube analysis, gas contract, tariff sheet, and other approved methods. Compliance shall be demonstrated at least once every calendar year.
[OAC 252:100-31]

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

4. Each engine at the facility shall have a permanent identification plate attached, which shows the make, model number, and serial number. [OAC 252:100-43]

5. At least once per calendar quarter, the permittee shall conduct tests of NO_x and CO emissions from the engine(s) and from each replacement engine/turbine when operating under representative conditions for that period. Testing is required for any engine/turbine that runs for more than 220 hours during that calendar quarter. A quarterly test may be conducted no sooner than 20 calendar days after the most recent test. Testing shall be conducted using a portable analyzer in accordance with a protocol meeting the requirements of the latest AQD Portable Analyzer Guidance document, or an equivalent method approved by Air Quality. When four consecutive quarterly tests show the engine/turbine to be in compliance with the emissions limitations shown in the permit, then the testing frequency may be reduced to semi-annual testing. A semi-annual test may be conducted no sooner than 60 calendar days nor later than 180 calendar days after the most recent test. Likewise, when the following two consecutive semi-annual tests show compliance, the testing frequency may be reduced to annual testing. An annual test may be conducted no sooner than 120 calendar days nor later than 365 calendar days after the most recent test. Upon any showing of non-compliance with emissions limitations or testing that indicates that emissions are within 10% of the emission limitations, the testing frequency shall revert to quarterly. Reduced testing frequency does not apply to engines with catalytic converters and oxidation catalyst. [OAC 252:100-8-6 (a)(3)(A)]

6. When periodic compliance testing shows engine exhaust emissions in excess of the lb/hr limits in Specific Condition Number 1, the permittee shall comply with the provisions of OAC 252:100-9 for excess emissions. [OAC 252:100-9]

7. Replacement (including temporary periods of 6 months or less for maintenance purposes) of the internal combustion engines and turbines with engines/turbines of lesser or equal emissions of each pollutant (in lbs/hr and TPY) are authorized under the following conditions.

   (a) The permittee shall notify AQD in writing not later than 7 days in advance of start-up of the replacement engine(s)/turbine(s). Said notice shall identify the old engine/turbine and shall include the new engine/turbine make and model, serial number, horsepower rating, fuel usage, stack flow (ACFM), stack temperature (°F), stack height (feet), stack diameter (inches), and pollutant emission rates (g/hp-hr, lb/hr, and TPY) at maximum horsepower for the altitude/location.
   (b) Quarterly emissions tests for the replacement engine(s)/turbine(s) shall be conducted to confirm continued compliance with NOx and CO emissions limitations. A copy of the first quarter testing shall be provided to AQD within 60 days of start-up of each replacement engine/turbine. The test report shall include the engine/turbine fuel usage, stack flow (ACFM), stack temperature (^oF), stack height (feet), stack diameter (inches), and pollutant emission rates (g/hp-hr, lbs/hr, and TPY) at maximum rated horsepower for the altitude/location.
   (c) Replacement equipment and emissions are limited to equipment and emissions which are not a modification under NSPS or NESHAP, or a significant modification under PSD. For existing PSD facilities, the permittee shall calculate the PTE or the net emissions increase resulting from the replacement to document that it does not exceed

significance levels and submit the results with the notice required by a. of this Specific Condition.

(d) Engines installed as allowed under the replacement allowances in this Specific Condition that are subject to 40 CFR Part 63, Subpart ZZZZ and/or 40 CFR Part 60, Subpart JJJJ shall comply with all applicable requirements.

8. The permittee shall comply with all applicable requirements of NSPS, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, for each affected facility, including but not limited to:

(a) §60.40c Applicability and delegation of authority.
(b) §60.41c Definitions.
(c) §60.42c Standard for sulfur dioxide (SO_2).
(d) §60.43c Standard for particulate matter (PM).
(e) §60.44c Compliance and performance test methods and procedures for sulfur dioxide.
(f) §60.45c Compliance and performance test methods and procedures for particulate matter.
(g) §60.46c Emission monitoring for sulfur dioxide.
(h) §60.47c Emission monitoring for particulate matter.
(i) §60.48c Reporting and recordkeeping requirements.

9. The permittee shall comply with the Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants, NSPS Subpart KKK, for all the affected sources at the facility, including but not limited to: [40 CFR 60.630 to 60.636]

(a) The owner/operator shall comply with the requirements of § 60.482-1(a), (b), and (d) and § 60.482-2 through § 60.482-10 except as provided in § 60.633 [§ 60.632(a)]
  (1) The owner/operator shall demonstrate compliance with §§ 60.482-1 to 60.482-10 for all affected equipment within 180 days of initial startup which shall be determined by review of records, reports, performance test results, and inspection using methods and procedures specified in § 60.485 unless the equipment is in vacuum service and is identified as required by § 60.486(e)(5). [§ 60.482-1(a), (b), & (d)]
  (2) The owner/operator shall comply with the monitoring, inspection, and repair requirements, for pumps in light liquid service, of § 60.482-2(a), (b), and (c) except as provided in §§ 60.482-2(d), (e), (f), and 60.633(d).
  (3) Information and data used to demonstrate that a reciprocating compressor is in wet gas service or is not in VOC service shall be recorded in a log that is kept in a readily accessible location. [§§ 60.633(f), 60.635(c), & § 60.486(j)]
  (4) Each compressor not in wet gas service and in VOC service shall be equipped with a seal system that includes a barrier fluid system that meets the requirements of § 60.482-3(b) through (g) and that prevents leakage of VOC to the atmosphere, except as provided in § 60.482–1(c) and § 60.482-3(h) and (i).
  (5) The owner/operator shall comply with the operation and monitoring requirements, for pressure relief devices in gas/vapor service, of § 60.482-4(a) and (b) except as provided in § 60-482-4(c) and § 60.633(b).

(6) Sampling and connection systems are exempt from the requirements of § 60.482-5. [§ 60.633(c)]

(7) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in § 60.632(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall be closed at all other times. [§ 60.482-6]

(8) The owner/operator shall comply with the monitoring, inspection, and repair requirements, for valves in gas/vapor service and light liquid service, of §§ 60.482-7(b) through (e), except as provided in §§ 60.633(d), 60.482-7(f), (g), and (h), §§ 60.483-1, 60.483-2, and 60.482-1(c). [§ 60.482-7(a)]

(9) The owner/operator shall comply with the monitoring and repair requirements, for pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors, of § 60.482-8(a) through (d). [§ 60.482-8]

(10) Delay of repair of equipment is allowed if it meets one of the requirements of § 60.482-9(a) through (e).

(11) The owner/operators using a closed vent system and control device to comply with these provisions shall comply with the design, operation, monitoring and other requirements of § 60.482-10(b) through (g). [§ 60.482-10(a)]

(b) An owner/operator may elect to comply with the alternative requirements for valves of §§ 60.483-1 and 60.483-2. [§ 60.632(b) & § 60.482-1(b)]

(c) An owner/operator may apply to the Administrator for permission to use an alternative means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to that achieved by the controls required in NSPS Subpart KKK. In doing so, the owner or operator shall comply with requirements of § 60.634. [§ 60.632(c)]

(d) The owner/operator shall comply with the test method and procedures of § 60.485 except as provided in §§ 60.632(f) and 60.633(h). [§ 60.632(d)]

(e) The owner/operator shall comply with the recordkeeping requirements of § 60.486 and the reporting requirements of § 60.487 except as provided in §§ 60.633, 60.635, and 60.636. [§ 60.632(e)]

(f) The owner/operator shall comply with the recordkeeping requirements of § 60.635(b) and (c) in addition to the requirements of § 60.486. [§ 60.635(a)]

(g) The owner/operator shall comply with the reporting requirements of § 60.636(b) and (c) in addition to the requirements of § 60.487. [§ 60.636(a)]

10. The facility is subject to 40 CFR Part 63, Subpart HH, and shall comply with all applicable requirements including but not limited to the following: [40 CFR 63.760 to 63.779]

(a) 40 CFR 63.760: Applicability and designation of affected source
(b) 40 CFR 63.761: Definitions
(c) 40 CFR 63.762: Startup, shutdowns, and malfunctions

(d) 40 CFR 63.764: General standards
(e) 40 CFR 63.765: Glycol dehydration unit process vents standards
(f) 40 CFR 63.766: Storage vessel standards
(g) 40 CFR 63.769: Equipment leak standards
(h) 40 CFR 63.771: Control equipment requirements
(i) 40 CFR 63.772: Test methods, compliance procedures, and compliance demonstrations
(j) 40 CFR 63.773: Inspection and monitoring requirements
(k) 40 CFR 63.774: Recordkeeping requirements
(l) 40 CFR 63.775: Reporting requirements
(m) 40 CFR 63.776: Delegation of authority
(n) 40 CFR 63.777: Alternate means of emission limitation

11. The permittee shall comply with all applicable requirements of NSPS, Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines, for each affected facility including but not limited to: [40 CFR 60.4230 to 60.4248]

(a) § 60.4230: Am I subject to this subpart?
(b) § 60.4231: What emission standards must I meet if I am a manufacturer of stationary SI internal combustion engines?
(c) § 60.4232: How long must my engines meet the emissions standards if I am a manufacturer of stationary SI internal combustion engines?
(d) § 60.4233: What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?
(e) § 60.4234: How long must I meet the emissions standards if I am an owner or operator of a stationary SI internal combustion engine?
(f) § 60.4235: What fuel requirements must I meet if I am an owner or operator of a stationary SI internal combustion engine?
(g) § 60.4236: What is the deadline for importing or installing stationary SI ICE produced in the previous model year?
(h) § 60.4237: What are the monitoring requirements if I am an owner or operator of a stationary SI internal combustion engine?
(i) § 60.4238: What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines $\leq$ 19 KW (25 HP).
(j) § 60.4239: What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines $\geq$ 19 KW (25 HP) that use gasoline?
(k) § 60.4240: What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines $\geq$ 19 KW (25 HP) that use LPG?
(l) § 60.4241: What are my compliance requirements if I am a manufacturer of stationary SI internal combustion engines participating in the voluntary certification program?
(m) § 60.4242: What other requirement must I meet if I am a manufacturer of stationary SI internal combustion engines?
(n) § 60.4243: What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?
(o) § 60.4244: What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

(p) § 60.4245: What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?
(q) § 60.4246: What parts of the General Provisions apply to me?
(r) § 60.4247: What parts of the mobile source provisions apply to me if I am a manufacturer of stationary SI internal combustion engines?
(s) § 60.4248: What definitions apply to this subpart?

12. The permittee shall comply with NSPS, Subpart OOOO, Standards of Performance for Crude Oil and Natural Gas Production, Transportation, and Distribution, for each affected facility, including but not limited to: [40 CFR 60.5360 to 60.5430]

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

(t) § 60.5415 How do I demonstrate continuous compliance with the standards for my gas well affected facility, my centrifugal compressor affected facility, my stationary reciprocating compressor affected facility, my pneumatic controller affected facility, my storage vessel affected facility, and my affected facilities at onshore natural gas processing plants?
(u) § 60.5416 What are the initial and continuous cover and closed vent system inspection and monitoring requirements for my storage vessel or centrifugal compressor affected facility?
(v) § 60.5417 What are the continuous control device monitoring requirements for my storage vessel or centrifugal compressor affected facility?
(w) § 60.5420 What are my notification, reporting, and recordkeeping requirements?
(x) § 60.5421 What are my additional recordkeeping requirements for my affected facility subject to VOC requirements for onshore natural gas processing plants?
(y) § 60.5422 What are my additional reporting requirements for my affected facility subject to VOC requirements for onshore natural gas processing plants?
(z) § 60.5423 What additional recordkeeping and reporting requirements apply to my sweetening unit affected facilities at onshore natural gas processing plants?
(aa) § 60.5425 What parts of the General Provisions apply to me?
(bb) § 60.5430 What definitions apply to this subpart?

13. The permittee shall comply with all applicable requirements of the NESHAP, Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines, for each affected facility including but not limited to: [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) § 63.6605 What are my general requirements for complying with this subpart?
(g) § 63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations?
(h) § 63.6615 When must I conduct subsequent performance tests?
(i) § 63.6620 What performance tests and other procedures must I use?
(j) § 63.6625 What are my monitoring, installation, operation, and maintenance requirements?
(k) § 63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?
(l) § 63.6635 How do I monitor and collect data to demonstrate continuous compliance?
(m) § 63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?
(n) § 63.6645 What notifications must I submit and when?
(o) § 63.6650 What reports must I submit and when?
(p) § 63.6655 What records must I keep?
(q) § 63.6660 In what form and how long must I keep my records?
(r) § 63.6665 What parts of the General Provisions apply to me?
(s) § 63.6670 Who implements and enforces this subpart?

(t) § 63.6675 What definitions apply to this subpart?

14. The permittee shall comply with all applicable requirements of the NESHAP, Subpart DDDDD, for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. [40 CFR 63.7480 to 63.6560]

(a) § 63.7480 What is the purpose of this subpart?
(b) § 63.7485 Am I subject to this subpart?
(c) § 63.7490 What is the affected source of this subpart?
(d) § 63.7491 Are any boilers or process heaters not subject to this subpart?
(e) § 63.7495 When do I have to comply with this subpart?
(f) § 63.7499 What are the subcategories of boilers and process heaters?
(g) § 63.7500 What emission limitations, work practice standards, and operating limits must I meet?
(h) § 63.7501 Affirmative Defense for Violation of Emission Standards During Malfunction.
(i) § 63.7505 What are my general requirements for complying with this subpart?
(j) § 63.7510 What are my initial compliance requirements and by what date must I conduct them?
(k) § 63.7515 When must I conduct subsequent performance tests, fuel analyses, or tune-ups?
(l) § 63.7520 What stack tests and procedures must I use?
(m) § 63.7521 What fuel analyses, fuel specification, and procedures must I use?
(n) § 63.7522 Can I use emissions averaging to comply with this subpart?
(o) § 63.7525 What are my monitoring, installation, operation, and maintenance requirements?
(p) § 63.7530 How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?
(q) § 63.7533 Can I use efficiency credits earned from implementation of energy conservation measures to comply with this subpart?
(r) § 63.7535 Is there a minimum amount of monitoring data I must obtain?
(s) § 63.7540 How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?
(t) § 63.7541 How do I demonstrate continuous compliance under the emissions averaging provision?
(u) § 63.7545 What notifications must I submit and when?
(v) § 63.7550 What reports must I submit and when?
(w) § 63.7555 What records must I keep?
(x) § 63.7560 In what form and how long must I keep my records?

15. The permittee shall maintain records of operations as listed below. These records shall be maintained on-site or at a local field office for at least five years after the date of recording and shall be provided to regulatory personnel upon request. [OAC 252:100-8-6 (a)(3)(B)]

(a) Operating hours for each engine, if operated less than 220 hours per quarter and not tested.
(b) Periodic emissions testing results (NO_x and CO) for each engine and each replacement engine.

(c) For the fuel(s) burned, the appropriate document(s) as described in Specific Condition No. 2.
(d) Operating hours for the emergency engine (UTILITY-1), monthly and 12-month rolling total.
(e) Records required by NSPS, 40 CFR Part 60, Subparts Dc, KKK, JJJJ, and OOOO.
(f) Records as required by NESHAP, 40 CFR Part 63, Subparts HH, ZZZZ, and DDDDD.
(g) Natural gas throughput of the amine unit (daily, monthly average).
(h) Natural gas throughput of the dehydration unit (daily, monthly average).
(i) H_2S concentration of the inlet gas (quarterly).
(j) Facility natural gas throughput, MMSCFD (monthly average).
(k) Glycol recirculation rate (monthly) or maximum pump capacity.
(l) Total condensate throughput of TNK-1 and TNK-2 (monthly & 12-month rolling totals).

16. The following records shall be maintained on-site to verify Insignificant Activities. No recordkeeping is required for those operations that qualify as Trivial Activities.
[OAC 252:100-8-6 (a)(3)(B)]

(a) For fuel storage/dispensing equipment operated solely for facility owned vehicles: records of the type and amount of fuel dispensed (annual).
(b) For crude oil and condensate storage tanks with a capacity of less than or equal to 420,000 gallons that store crude oil and condensate prior to custody transfer: records of capacity of the tanks and the amount of throughput (annual).
(c) For fluid storage tanks with a capacity of less than 39,894 gallons and a true vapor pressure less than 1.5 psia: records of capacity of the tanks and contents.
(d) For activities that have the potential to emit less than 5 TPY (actual) of any criteria pollutant: the type of activity and the amount of emissions from that activity (annual).

17. No later than 30 days after each anniversary date of the issuance of the original Title V operating permit (July 13, 2001), the permittee shall submit to Air Quality Division of DEQ, with a copy to the US EPA, Region 6, a certification of compliance with the terms and conditions of this permit. [OAC 252:100-8-6 (c)(5)(A) & (D)]

18. The Permit Shield (Standard Conditions, Section VI) is extended to the following requirements that have been determined to be inapplicable to this facility, or the listed emissions unit groups: [OAC 252:100-8-6(d)(2)]

(a) 40 CFR Part 60, NSPS, Subparts K, Ka, and Kb, VOL Storage Vessels
(b) OAC 252:100-33, Control of Emissions of Nitrogen Oxides
(c) OAC 252:100-35, Control of Emission of Carbon Monoxide

19. On issuance, Permit No. 2016-0193-TVR3 replaces and supersedes Permit No. 2011-064-TVR2 (M-1).

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

SECTION I. DUTY TO COMPLY

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

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

C. The permittee shall comply with all conditions of this permit. Any permit noncompliance shall constitute a violation of the Oklahoma Clean Air Act and shall be grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application. All terms and conditions are enforceable by the DEQ, by the Environmental Protection Agency (EPA), and by citizens under section 304 of the Federal Clean Air Act (excluding state-only requirements). This permit is valid for operations only at the specific location listed.
[40 C.F.R. §70.6(b), OAC 252:100-8-1.3 and OAC 252:100-8-6(a)(7)(A) and (b)(1)]

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

SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

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

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

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

SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING

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

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

B. Records of required monitoring shall include:

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

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

C. No later than 30 days after each six (6) month period, after the date of the issuance of the original Part 70 operating permit or alternative date as specifically identified in a subsequent Part 70 operating permit, the permittee shall submit to AQD a report of the results of any required monitoring. All instances of deviations from permit requirements since the previous report shall be clearly identified in the report. Submission of these periodic reports will satisfy any reporting requirement of Paragraph E below that is duplicative of the periodic reports, if so noted on the submitted report. [OAC 252:100-8-6(a)(3)(C)(i) and (ii)]

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

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

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

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

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

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

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

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

[OAC 252:100-8-6(a)(3)(A)(iv), and OAC 252:100-43]

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

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

SECTION IV. COMPLIANCE CERTIFICATIONS

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

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

B. The compliance certification shall describe the operating permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the methods used for determining compliance, currently and over the reporting period. The compliance certification shall also include such other facts as the permitting authority may require to determine the compliance status of the source.

[OAC 252:100-8-6(c)(5)(C)(i)-(v)]

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

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

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

SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

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

SECTION VI. PERMIT SHIELD

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

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

SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

The permittee shall file with the AQD an annual emission inventory and shall pay annual fees based on emissions inventories. The methods used to calculate emissions for inventory purposes shall be based on the best available information accepted by AQD.
[OAC 252:100-5-2.1, OAC 252:100-5-2.2, and OAC 252:100-8-6(a)(8)]

SECTION VIII. TERM OF PERMIT

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

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

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

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

SECTION IX. SEVERABILITY

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
[OAC 252:100-8-6 (a)(6)]

SECTION X. PROPERTY RIGHTS

A. This permit does not convey any property rights of any sort, or any exclusive privilege.
[OAC 252:100-8-6(a)(7)(D)]

B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued. [OAC 252:100-8-6(c)(6)]

SECTION XI. DUTY TO PROVIDE INFORMATION

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

reissuing, terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit.
[OAC 252:100-8-6(a)(7)(E)]

B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. § 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment.
[OAC 252:100-8-6(a)(7)(E)]

C. Notification to the AQD of the sale or transfer of ownership of this facility is required and shall be made in writing within thirty (30) days after such sale or transfer.
[Oklahoma Clean Air Act, 27A O.S. § 2-5-112(G)]

SECTION XII. REOPENING, MODIFICATION & REVOCATION

A. The permit may be modified, revoked, reopened and reissued, or terminated for cause. Except as provided for minor permit modifications, the filing of a request by the permittee for a permit modification, revocation and reissuance, termination, notification of planned changes, or anticipated noncompliance does not stay any permit condition.
[OAC 252:100-8-6(a)(7)(C) and OAC 252:100-8-7.2(b)]

B. The DEQ will reopen and revise or revoke this permit prior to the expiration date in the following circumstances: [OAC 252:100-8-7.3 and OAC 252:100-8-7.4(a)(2)]

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

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

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

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

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

SECTION XIII. INSPECTION & ENTRY

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

(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]

DRAFT

PART 70 PERMIT

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

Permit No. 2016-0193-TVR3

DCP Operating Company, LP,

having complied with the requirements of the law, is hereby granted permission to operate the Sholem Gas Plant located in Section 2, T1S, R4W, Stephens County, Oklahoma, subject to Major Source Standard Conditions dated June 21, 2016, and Specific Conditions, both attached.

This permit shall expire five (5) years from the date below, except as authorized under Section VIII of the Standard Conditions.

Director, Air Quality Division **Issuance Date**

DCP Operating Company, LP
Attn: Ms. Dana Stephens
Northern Business Unit/Midcontinent Air Permitting Manager
370 17th Street, Suite 2500
Denver, CO 80202-9732

SUBJECT: Part 70 Operating Permit No. **2016-0193-TVR3**
Facility: Sholem Gas Plant
Section 2, T1S, R4W, Stephens County, Oklahoma

Dear Ms. Stephens:

Air Quality Division has completed the initial review of your major source operating permit application referenced above. This application has been determined to be a **Tier II.** In accordance with 27A O.S. §2-14-302 and OAC 252:002-31 the enclosed draft permit is now ready for public review. The requirement for public review include the following steps which you must accomplish:

1. Publish at least one legal notice (one day) in at least one newspaper of general circulation within the county where the facility is located. (Instruction 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 and a copy of the application at a convenient location (preferably a public location) within the county of the facility.

3. Send to AQD a copy of the proof of publication notice from Item #1 above together with any additional comments or requested changes, which you may have on the draft permit.

Thank you for your cooperation in this matter. If we may be of further service, or you have any questions about this permit, please contact the permit writer or me at (405) 702-4100.

Sincerely,

Phillip Fielder, P.E.
Permits and Engineering Group Manager
AIR QUALITY DIVISION

Texas Commission on Environmental Quality
Operating Permits Divisions (MC 163)
P. O. Box 13087
Austin, Texas 78711-3087

SUBJECT: Part 70 Operating Permit No. **2016-0193-TVR3**
DCP Operating Company, LP
Facility: Sholem Gas Processing Plant
Location: S2, T1S, R4W, Stephens County, Oklahoma
Permit Writer: Iftekhar Hossain

Dear Sir / Madame:

The owner/operator of the above-referenced facility has applied to renew the facility's Title V operating permit under 40 CFR Part 70. Air Quality Division has completed the initial review of the application and prepared a draft permit for public review. Since this facility is within 50 miles of the **Oklahoma-Texas** border, a copy of the proposed permit will be provided to you upon request. Information on all permit and a copy of this draft permit are available for review by the public in the Air Quality Section of DEQ Web Page: *http://www.deq.state.ok.us.*

Thank you for your cooperation. If you have any questions, please refer to the permit number above and contact the permit writer or this office at (405) 702-4100.

Sincerely,

Phillip Fielder, P.E.
Permits & Engineering Group Manager
AIR QUALITY DIVISION