

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

MEMORANDUM

April 20, 2015

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

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

THROUGH: Peer Review

FROM: David Schutz, P.E., New Source Permits Section

SUBJECT: Evaluation of Permit Application No. **2012-924-C (M-3)(PSD)**
Holly Energy Partners, LP
Tulsa Refinery Tank Farm and Product Loading
New Inline Gasoline Blender
902 W. 25th Street, Tulsa, Tulsa County (36.12599°N, 96.00158°W)
Portions of Sections 13, 14 and 23, T19N, R12E
FAC ID 9701

I. INTRODUCTION

Holly Energy Partners (HEP) operates the gasoline loading terminal associated with the Holly Refining & Marketing (HRMT) East and West Tulsa Refineries. Operations of the facilities are currently authorized under three separate permits:

- The HRMT West Refinery is under Part 70 Permit No. 2010-599-TVR (M-1), issued January 2, 2014.
- The HRMT East Refinery is under Part 70 Permit No. 2012-1062-TVR2, issued May 13, 2013.
- The loading terminal and tank farms operated by HEP are under Part 70 Permit No. 2012-924-TV (M-2), issued June 11, 2014.

The two refineries owned by HRMT were acquired at separate times, therefore, are permitted separately. The loading terminal is owned and operated by HEP, resulting in another separate permit for it. However, the two refineries and loading terminal are interconnected and collocated, requiring that they be treated as a single facility when conducting a PSD analysis.

HEP and HRMT propose a construction project to expand the refineries. The project will commence in the 2014-2015 time frame. There will be new process units added and modification of existing process units such that the total capacities of the refineries will be increased to 170,000 BPD from the current capacity of 160,000 BPD. There will be “associated” emissions increases from most units in the refinery, excepting those emissions units which are independent of unit process rates such as emergency engines, fugitive VOC leakage from valves, flanges, etc. The net emissions change analysis applies to all three facilities, and all PSD analyses other than BACT will encompass all three facilities.

The proposed project is subject to Prevention of Significant Deterioration (PSD) review for added emissions of greenhouse gases (GHG), carbon monoxide (CO), nitrogen oxides (NO_x), and particulate matter (PM₁₀ / PM_{2.5}). However, the project nets out from full PSD review for VOC and SO₂, and the only added emissions at the HEP portion of the facility are VOC. The project will add a new “in-line” gasoline blender and replace the existing propane loading unit, both with fugitive VOC leakage emissions only; the other emissions units at HEP (loading terminal / vapor combustor, tanks, and fugitive VOC leakage components) are all “existing” and not subject to BACT. Except for the analysis of net emissions changes, this permit will address only the new process unit proposed to be added at HEP.

II. FACILITY DESCRIPTION

The loading terminal and storage tanks are associated with the Holly Refining and Marketing Tulsa Refinery. Refining is a complex process to make crude oil into a variety of products, including gasoline, heating oil, lubricants, and feedstocks for other industries. Refining equipment and processes involve a certain amount of iterative treatment, in which materials may be processed more than once at a particular location or may be returned to an earlier step in the system for further handling. A very general description of the entire process at this particular refinery starts with crude oil being processed in the Crude Unit. Process streams flow from the Crude Unit to the Fluid Catalytic Cracking Unit (FCCU), the Distillate Hydrotreating Unit (DHTU), Naphtha Hydrodesulfurization Unit (NHDS), and the Unifiner/Penex (Penex). A residual stream becomes asphalt or residual fuel oil. Tulsa Refinery final products are classified as gasoline, distillate, residual fuel oil, and asphalt, but there are also intermediate products, such as propane, butane, propylene, and sulfur.

Descriptions of each unit follow for those operations which are part of the HEP permit.

A. Product Blending (HEP)

HEP is responsible for tankage at the facility. The majority of the tanks are fixed roof tanks storing materials of low volatility. More volatile material is stored in floating roof tanks or pressure vessels such as bullet tanks for propane and propene and spheres for butane. The refinery operates the propane and butane pressurized vessels. HEP receives crude oil and ships out gasoline, diesel and intermediate products by pipeline. HEP is also responsible for the asphalt loading racks. Asphalt and flux are loaded out by truck (EUG 14, Point ID 6170) and by railcar (EUG 14, Point ID 6169). There is also a diesel railcar loading rack (EUG 14, Point ID 14455) and a gas oil truck loading rack (EUG 14, Point ID idle).

The facility will construct a new inline gasoline blender. The blender is a completely-enclosed continuous process, rather than a batch process. The only emissions from the new blender are fugitive VOC emissions from valves, flanges, etc. The new blender will be in EUG-31.

B. Sales Terminal/HEP

The sales terminal is responsible for the shipment of gasoline, diesel, and propane via tank trucks. All of the propane produced and stored at the refinery is shipped out from the terminal. The sales terminal ships much of the gasoline and some of the diesel produced in the refinery. The gasoline and diesel are loaded from a four-bay, bottom-fill loading rack that is controlled by a Vapor Combustion Unit (EUG 15, Point ID 6275). An automatic interlock device shuts down the loading operation if the combustor malfunctions. All pumps are powered by electricity. Under ideal conditions, these pumps are capable of pumping a combined total of 7,200 gallons per minute, but this rate is not sustainable for long periods. The propane truck loading rack, originally constructed in 1951, uses vapor balance with the propane tanks or fuel gas system at the refinery.

New tanks will be constructed, but designs of the tanks are not yet final. The new tanks will be internal or external floating roof tanks or cone roof tanks as appropriate for the products stored.

C. Miscellaneous Points

Miscellaneous equipment leaks or fugitive emissions occur from all piping components throughout the refinery. These emissions are estimated with EPA factors and there are two points associated with fugitive emissions. Existing fugitive emissions from the terminal are now included with the refinery fugitive emissions as EUG 16, Point ID 6172.

III. PROPOSED PROJECT DESCRIPTIONS

The proposed projects for each facility are listed following. The new and modified units are categorized as combustion units (heaters); process units with fugitive VOC leakage from valves, flanges, etc.; the Fluid Catalytic Cracking Unit (FCCU); the Continuous Catalyst Regenerator serving the Platformer Unit; and storage tanks.

HEP (Loading Terminal and Storage)

- A new 90,000 BPCD Inline Gasoline Blender.
- A new Propane Loading Unit will replace the existing Propane Loading Unit.
- Construction of new tanks with VOC emissions up to 22.1 TPY will be authorized, but specifications for the new tanks are not yet known.

East Refinery

- A new 10,000 BPCD Liquid Petroleum Gas (LPG) Recovery Unit charging 32 MMSCFD gas;
- A new 10,000 BPCD Residuum Oil Supercritical Extraction (ROSE) Unit with a new 42 MMBTUH HHV heater;
- Expanded Diesel Hydrotreater Unit (DHTU), with a new 50 MMBTUH HHV helper heater;
- Revamped FCCU, increasing process throughput from 24,000 BPCD to capacity of approximately 28,400 BPCD;
- Modified Naphtha Hydrodesulfurizer (NHDS) Unit, with a new 10 MMBTUH HHV helper heater;
- Modified Continuous Catalytic Reforming (CCR) Unit, with a new 25 MMBTUH HHV helper heater;
- A new Naphtha Fractionation Column which will require steam from facility boilers; and
- Expansion of the Alkylation (ALKY) Unit to 6,500 BPD, using steam from existing boilers for process heat.
- New tanks will be added to the East Refinery, but the final designs are not yet ready. As an interim measure, a limit of 1.24 TPY VOC from the new tanks will be established.

West Refinery

- Propane Deasphalter (PDA) Unit revamp and modification to become a Residuum Oil Supercritical Extraction (ROSE) Unit, with a new 76 MMBTUH HHV heater; and
- A new 10 MMSCFD Hydrogen (H₂) Plant will be constructed, with a reformer heater sized at 125 MMBTUH. The heater will be fueled with natural gas or refinery fuel gas, which may include Pressure Swing Absorption (PSA) off-gas.
- New tanks will be added to the West Refinery, but the final designs are not yet ready. As an interim measure, a limit of 26.69 TPY VOC from the new tanks will be established.

IV. EQUIPMENT

Tank identifiers include a facility-wide “Tank No.” and a “Point ID” used in annual emission inventories. Tank capacities are all stated in barrels. Only the emission points are identified in the following descriptions.

A. New/Modified Units

EUG 31 Inline Gasoline Blender Fugitive Emissions

Equipment leak emissions from components in the proposed new inline gasoline blender are listed following.

Component	Estimated Counts
Gas/Vapor Valves	200
Light Liquid Valves	400
Light Liquid Pumps	6
Flanges / Connectors	1,222
Pressure Relief Devices	5

EUG 33 New Propane Loading Unit Fugitive Emissions

Equipment leak emissions from components in the proposed new propane loading unit are listed following.

Component	Estimated Counts
Gas/Vapor Valves	32
Light Liquid Valves	16
Light Liquid Pumps	2
Pressure Relief Devices	4
Flanges/connectors	108

EUG 2, EUG 5, and EUG 7 New Tanks

New tanks will go into EUG 5 for internal floating roof tanks, EUG 7 for external floating roof tanks, or EUG 2 for cone roof tanks (low vapor pressure products such as diesel).

B. Existing Units

EUG 1 MACT CC Group 1 Storage Vessels - Internal Floating Roof (IFR)

These storage vessels are regulated under 40 CFR 63 Subpart CC (MACT CC) as Group 1 Storage Vessels and are limited to the existing equipment as it is. This list includes all storage vessels affected by NSPS Subparts K and Ka, because the overlap provisions of MACT CC require such vessels to comply only with the provisions of MACT CC.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
1	6173	1949	48'	140'	130,000
2	6174	1949	48'	140'	131,000
3	6175	1949	48'	140'	130,000
8	6179	1949	48'	140'	130,000
14	6182	1915	30'	115'	55,000
18	6246	1910	30'	96'	37,500
442	6220	1923	30'	53'	11,700
460	6232	1927	40'	119'	80,000
461	6233	1927	40'	119'	80,000
465	6235	1927	40'	119'	80,000
471	6239	1927	40'	119'	80,000

EUG 2 MACT CC Group 1 Storage Vessels - External Floating Roof (EFR)

These storage vessels are regulated under 40 CFR 63 Subpart CC (MACT CC) as Group 1 Storage Vessels and are limited to the existing equipment as it is.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
601	6276	1951	48'	55'	18,500
602	6277	1951	48'	40'	9,700

EUG 3 MACT CC Group 2 Storage Vessels - Fixed Roof (FR)

These storage vessels are regulated under 40 CFR 63 Subpart CC (MACT CC) Group 2 Storage Vessels and are limited to the existing equipment as it is. Due to the overlap provisions of MACT CC (§63.640(n)), this list includes any Group 2 storage vessels that are also regulated under NSPS Subparts K or Ka but that are not required to meet the K/Ka control standards, as they must meet the MACT requirements per §63.640(n)(7). Storage vessels required to meet control requirements under NSPS Subparts K and Ka are required to comply only with those subparts, per §63.640(n)(6), and are not included in this list.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
9	6242	2005	48'	150'	151,100
10	6180	1910	30'	96'	37,500
11	6181	1910	30'	96'	37,500
15	6244	1949	48'	140'	130,000
16	6245	2003	48'	150'	151,100
17	6183	1910	30'	96'	37,500
34	6252	1922	30'	53'	11,700
36	6253	1922	30'	53'	11,500
40	6185	1923	40'	32'	6,100
41	6248	1922	35'	29'	3,900
63	41639	1973	18'	20'	1,000
102	6189	1907	30'	96'	37,500
103	6190	1907	30'	96'	37,500
104	6255	2012	30'	96'	37,500
107	6257	2012	40'	100'	55,000
108	6191	1907	30'	96'	37,500
109	6192	1907	30'	96'	37,500
110	6193	1907	30'	96'	37,500
111	6194	1907	30'	96'	37,500
115	38828	2007	48'	150'	150,000
215	38842	2007	48'	150'	150,000
116	6199	1907	30'	96'	37,500
117	6200	1907	35'	115'	63,500

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
122	6203	1907	30'	96'	37,500
123	6260	1907	30'	96'	37,500
124A	6261	1907	30'	96'	37,500
125	6262	1907	30'	96'	37,500
129	6204	1949	36'	35'	6,100
130	6205	1949	36'	35'	6,100
131	6265	1907	30'	96'	37,500
451	6229	1930	30'	53'	11,700
452A	6230	1930	32'	53'	11,500
603	23132	1951	30'	20'	1,617

EUG 3A MACT CC Group 2 Storage Vessels - Fixed Roof (FR)

These storage vessels are regulated under 40 CFR 63 Subpart CC (MACT CC) Group 2 Storage Vessels and NSPS Subpart UU are limited to the existing equipment as it is. Due to the overlap provisions of MACT CC (§63.640(n)), this list includes any Group 2 storage vessels that are also regulated under NSPS Subparts K or Ka but that are not required to meet the K/Ka control standards, as they must meet the MACT requirements per §63.640(n)(7). Storage vessels required to meet control requirements under NSPS Subparts K and Ka are required to comply only with those subparts, per §63.640(n)(6), and are not included in this list.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
107	6257	2012	40'	100'	55,000
124A	6261	1907	30'	96'	37,500

EUG 5 NSPS Subpart Kb Storage Vessels - Internal Floating Roof (IFR)

These storage vessels are regulated under 40 CFR 60, NSPS Subpart Kb and are limited to the existing equipment as it is. Due to the overlap provisions of MACT Subpart CC, these vessels are required to comply only with NSPS Subpart Kb.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
4	23129	2003	48'	134'	120,600
6A	6177	2013	40'	114'	54,000
7A	6178	2011	40	114'	73,000
31	6250	1998	48'	48'	15,000
472	6240	2007	48'	150'	140,000
605	6278	1951*	32'	30'	3,400
450A	6228	2012	30'	53'	12,000

445	6223	2012	48	70	30,000
464	6234	2013	40'	119'	80,000
466	6236	2013	40'	119'	80,000
467A	6252	2013	40'	119'	80,000
470A	6238	2013	40'	119'	80,000
473A	6241	2013	40'	119'	80,000

*Built as a fixed roof in 1951, converted to IFR in 1987, subject to Subpart Kb.

EUG 7 MACT CC Group 2 Storage Vessels External Floating Roof (EFR) Tank

This storage vessel is regulated under 40 CFR 63, Subpart CC (MACT CC) Group 2 Storage Vessels and is limited to the existing equipment as it is. EUG 7 tanks contain low-vapor pressure fluids and are not subject to OAC 252:100-37 and 39.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
114	6197	1949	48'	140'	131,000

EUG 14 Low Vapor Pressure Loading Operations

There are several loading racks that handle materials that are not treated as VOCs under OAC Subchapters 37 and 39. All of these racks were constructed in 1949. These units are “grandfathered” (constructed prior to any applicable rule). There are no emission limits or compliance obligations applied to this EUG under Title V but it is limited to the existing equipment as it is.

Rack	Point ID	Material	Capacity
Black Oil Railcar	6169	Asphalt, flux, vacuum tower bottoms	12 cars
Black Oil Truck	6170	Asphalt, flux, vacuum tower bottoms	3 trucks
Diesel Railcar	14488	#2 Diesel	8 cars
Gas oil Truck	6181	Gas oils	2 trucks

EUG 15 High Vapor Pressure Loading Operations

There are several loading racks that handle VOC materials. The propylene and butane truck loading facilities have vapor balance systems. The propane truck loading rack has vapor balance with the propane tanks or fuel gas system at the refinery. Emissions from the terminal gasoline and diesel rack are vented to a vapor combustion unit. This device exhausts at 35' above grade. All units except the propylene and HSR racks are “grandfathered” (constructed prior to any applicable rule). The HSR rack is an affected equipment item under MACT EEEE, but there are no standards that apply.

Rack	Point ID	Material	Capacity	Date
Terminal	6275	Gasoline and diesel	4 trucks	1951
Terminal	6275	Propane	1 truck	1951

EUG 16 Existing Fugitive Emissions

Equipment leak emissions from components throughout the storage and loading units are included in this Group. There are no annual emission limits applied to this EUG under Title V but it is limited to the existing equipment as it is. VOC concentrations in ppm are limited by various rules and regulations, including MACT Subpart CC and OAC 252:100-39-15. Aggregated emission points are identified as Point ID 6172.

Component	Estimated Counts
Light Liquid Valves	880
Heavy Liquid Valves	220
Light Liquid Pumps	10
Pressure Relief Devices	10
Connectors	3000

V. EMISSIONS

A. New Emissions Units

EUG 31 Inline Gasoline Blender Fugitive Emissions

Equipment leaks from the terminal are included in this Group. Emission factors are taken from the “Protocol for Equipment Leak Emission Estimates” (EPA-453/R-95-017), using light liquid/gas service data from Table 2-10, except for flanges/connectors, for which the factor is taken from Table 2-2 of the same reference.

Source	# of items	Factor lb/hr/source	Control Efficiency	Emissions	
				lb/hr	TPY
Gas/vapor valves	200	0.059	98%	0.24	1.03
Light Liquid Valves	400	0.02403	98%	0.19	0.84
Light Liquid Pumps	6	0.2513	85%	0.23	0.99
Pressure Relief Devices	5	0.353	98%	0.04	0.15
Flanges/connectors	1,222	0.00055	30%	0.47	2.06
TOTALS				1.17	5.07

EUG 33 New Propane Loading Unit Fugitive Emissions

Equipment leaks from the terminal are included in this Group. Emission factors are taken from the “Protocol for Equipment Leak Emission Estimates” (EPA-453/R-95-017), using light liquid/gas service data from Table 2-10, except for flanges/connectors, for which the factor is taken from Table 2-2 of the same reference.

Source	# of items	Factor lb/hr/source	Control Efficiency	Emissions	
				lb/hr	TPY
Gas/vapor valves	32	0.059	98%	0.04	0.16
Light Liquid Valves	16	0.02403	98%	0.01	0.03
Light Liquid Pumps	2	0.2513	85%	0.08	0.33
Pressure Relief Devices	4	0.353	98%	0.03	0.12
Flanges/connectors	108	0.00055	30%	0.04	0.18
TOTALS				0.20	0.82

EUG 2, EUG 5, and EUG 7 New Tanks

There will be up to 28.07 TPY VOC added for new tanks which may be built.

Existing Emissions Units

Unless otherwise stated, all emission estimates in Section V reflect operations as reported in the 2005 and 2006 Inventory Turn-Around Documents. Additionally, most VOC emissions are non-HAP only, unless otherwise indicated. The “Contents” column of each table for tanks reflects information presented in the Turn-Around Document, and does not represent a classification or requirement. Assumptions and data used in calculating emissions for each EUG are reflected in the following analyses. All units are considered “affected” (i.e., they have associated emissions increases which have been evaluated for emissions increases).

EUG 15 High Vapor Pressure Loading Operations

VOC emissions were calculated as follows. Uncontrolled emissions were calculated using the methods of AP-42 (1/95), Section 5.2, using the following constants:

Liquid	Annual Throughput (kgal)	Saturation Factor	Vapor Pressure (psia)	Molecular Weight	Temperature	Loading Loss lb/kgal	TOTAL TPY VOC
Diesel	229,950	1.0	0.0086	130	522	0.03	3.07
Gasoline	593,271	1.0	6.02	66	522	9.48	2813.27
Ethanol	65,919	1.0	1.81	46.2	522	2.00	65.79
TOTALS	889,140						2882.12

Section 5.2 shows a 99.2% capture efficiency, with the balance of 0.8% of uncontrolled VOC being emitted as fugitive VOC emissions.

NOx and CO emissions were based on manufacturer guarantees. SO₂, PM₁₀, and PM_{2.5} were calculated using factors from AP-42 (10/96), Section 1.5. This treats the vapors combusted as LPG.

Maximum heat release in the combustor is 55 MMBTUH. Dividing maximum throughput of 889,140,000 gallons per year by 432,000 GPH equals 2,058 hours per year equivalent. (Note: 1 gallon = 3.785 liters).

Hourly Process Rate	Annual Process Rate	Pollutant	Emission Factor	Emissions	
				lb/hr	TPY
432,000 gal; 1,635,120 liters	889,140,000 gallons; 3,365,394,900 liters	NOx	4 mg/l	14.41	14.83
		CO	10 mg/l	36.02	37.06
		VOC	99.5% control + 0.8% of uncontrolled	36.51	37.45
		PM ₁₀ / PM _{2.5}	0.4 mg/l	1.44	1.48
		SO ₂	0.105 mg/l	0.38	0.39
		CO _{2e}	74 kg/MMBTU	8954	9214

EUG 1 MACT CC Group 1 Storage Vessels - Internal Floating Roof (IFR)

VOC emissions are calculated using the current version of EPA’s TANKS program.

Tank #	Contents	Turnovers	TPY
1	Crude	21.5	2.09
2	Crude	28.5	5.38
3	Crude	106	3.36
8	Crude	27.9	2.09
14	HSR	2.87	8.47
18	Slop oil	4.62	5.24
442	Gasoline blendstock	6.22	0.73
460	Gasoline	28.1	11.2
461	Gasoline	9.44	5.28
464	Gasoline	16.3	6.84
465	Gasoline	10.3	6.28
466	Gasoline	26.5	5.31
467	Gasoline	24.9	7.46
471	Gasoline	1.92	0.33
Total			70.06

EUG 2 MACT CC Group 1 Storage Vessels - External Floating Roof (EFR)

VOC emissions are calculated using the current version of EPA’s TANKS program.

Tank #	Contents	Turnovers	TPY
601	Gasoline	109	5.39
602	Gasoline	21.7	4.26
Total			9.65

EUG 3/3A MACT CC Group 2 Storage Vessels - Fixed Roof (FR)

VOC emissions are calculated using the current version of EPA's TANKS program.

Tank #	Contents	Turnovers	TPY
9	Gas oil	7.33	15.2
10	#2 Diesel	19.4	0.56
11	#1 Diesel	27.3	0.66
15	Gas oil	16.2	10.1
16	Gas oil	9.02	4.04
17	Untreated LCGO	1.49	0.14
34	Asphalt	4.87	0.32
36	Asphalt	5.87	0.54
40	Decanted oil	44.8	0.01
41	Slop oil	18.7	5.57
102	Distillate	26.1	1.06
103	Distillate	10.5	0.36
104A	#2 Diesel	41.9	0.84
107A	Resid, asphalt, #6 fuel oil, decant	18.18	1.5
108	Black oil	4.87	1.17
109	Black oil	4.87	1.86
110	#2 Diesel	25.0	0.62
111	Kerosene	24.5	0.59
115A	#1 diesel	21.1	0.48
116	Kerosene	41.4	0.69
117	#2 Diesel	29.2	1.16
121	Idle	--	--
122	Decanted oil	7.29	0.02
123	Asphalt	4.87	0.50
124A	Black oil	4.87	0.14
125	Black oil	4.87	1.95
129	Refinery fuel #6	0.01	0.00
130	Refinery fuel #6	14.1	0.01
131	Black oil	4.87	1.61
400	Slop oil	8.47	1.05
401	Slop oil	78.2	1.96
451	#2 Diesel	36.0	0.27
452A	#2 Diesel	1123	1.20
603	#2 Diesel	7.29	0.02
Total			57.20

EUG 5 NSPS Subpart Kb Storage Vessels – Internal Floating Roof (IFR)

VOC emissions are calculated using the current version of EPA’s TANKS program.

Tank #	Contents	Turnovers	TPY
4	SCAN feed	8.9	2.38
6A	HSR	39.5	3.89
7A	Gasoline	480	2.0
31	Slop oil	6.0	1.01
472	Gasoline	10.5	5.29
605	Gasoline	31.8	1.73
450A	Gasoline	876	3.0
445A	Gasoline	1168	5.0
470A	Gasoline	17.0	4.71
473A	Gasoline	11.8	7.14
Total			36.15

EUG 7 MACT CC Group 2 Storage Vessel - External Floating Roof (EFR)

Non-HAP VOC emissions of 4.41 TPY are calculated using the current version of EPA’s TANKS program for #2 Diesel Tank #114 with 15.1 turnovers in 2006.

EUG 14 Low Vapor Pressure Loading Operations

These racks handle materials with little or no volatile content. Emission estimates are calculated using mass balance for VOC (exclusive of HAPs), loading factors for HAPs from Section 5.2 of AP-42 (1/95) and actual 2008 amounts loaded. HAP emissions were not calculated for black oil and were less than 10 pounds per year at the diesel railcar rack.

Rack	MM Gallons	VOC (TPY)
Black Oil Railcar	17.1	0.80
Black Oil Truck	116	5.43
Diesel Railcar	44.6	0.65
Gas Oil Truck	-0-	0.00

EUG 15 High Vapor Pressure Loading Operations

There are several loading racks that handle VOC materials. The terminal gasoline and diesel racks are vented to a vapor combustion device.

Propane rack loading losses are negligible.

EUG 16 Existing Fugitive Emissions

Equipment leaks from the terminal are included in this Group. Emission factors are taken from the “Protocol for Equipment Leak Emission Estimates” (EPA-453/R-95-017), using light liquid/gas service data from Table 2-10, except for flanges/connectors, for which the factor is taken from Table 2-2 of the same reference. Screening factors for Table 2-10 calculations include 2,000 ppm for pump seals and 500 ppm for all others.

Source	# of items	Factor lb/hr/source	Emissions	
			lb/hr	TPY
Light Liquid Valves	880	0.02403	21.15	92.62
Heavy Liquid Valves	220	0.00051	0.11	0.49
Light Liquid Pumps	10	0.2513	2.51	11.00
Pressure Relief Devices	10	0.353	3.53	15.46
Connectors	3300	0.00055	1.82	7.95
TOTALS			29.12	127.52

Facility-wide Emission Totals

The following table summarized all of the estimated individual EUG emission amounts as they existed in the original renewal. Note that only those numbers arising from equipment with clearly stated capacities or ratings can be assumed to represent maximum emissions. All other data represented the refinery as it operated in 2006. There is very little information available as to “design” capacity of any unit, because refining is an evolutionary process, with more efficient use of existing equipment allowing greater throughput.

CRITERIA POLLUTANTS

EUG	NO _x		CO		VOC		PM ₁₀ / PM _{2.5}		SO ₂	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	--	--	--	--	--	70.06	--	--	--	--
2	--	--	--	--	--	9.65	--	--	--	--
3 / 3A	--	--	--	--	--	56.23	--	--	--	--
5	--	--	--	--	--	36.15	--	--	--	--
7	--	--	--	--	--	4.41	--	--	--	--
14	--	--	--	--	--	6.88	--	--	--	--
15	14.41	14.83	36.02	37.06	36.51	37.45	1.44	1.48	0.38	0.39
16	--	--	--	--	29.12	127.52	--	--	--	--
31	--	--	--	--	1.17	5.07	--	--	--	--
33	--	--	--	--	0.20	0.82	--	--	--	--
TOTALS	14.41	14.83	36.02	37.06	67.00	354.24	1.44	1.48	0.38	0.39

Greenhouse gas emissions are primarily CO₂ resulting from vapor combustion, with a maximum of 9,214 TPY.

The following table of HAP emissions is taken from the 2006 Turnaround document and is not an attempt to analyze potential-to-emit for any pollutant. It does, however, demonstrate that the facility is a major source of HAPs.

HAPs

Pollutant	CAS #	TPY
1,1,1-Trichloroethane	71-55-6	<.01
1,3-Butadiene	106-99-0	0.30
2,2,4-Trimethylpentane	540-84-1	8.73
Acetaldehyde	75-07-0	0.12
Acrolein	107-02-8	0.08
Antimony & compounds	NA	0.02
Arsenic compounds	NA	0.01
Benzene	71-43-2	8.19
Biphenyl	92-52-4	0.76
Cadmium & compounds	NA	0.01
Carbon disulfide	75-15-0	0.65
Carbonyl sulfide	463-58-1	2.21
Chromium & compounds	NA	0.05
Cobalt & compounds	NA	0.02
Cresols	1319-77-3	0.03
Cumene	98-82-8	1.00
Cyanide & compounds	NA	3.00
Diethanolamine	111-42-2	0
Ethylbenzene	100-41-4	4.57
Formaldehyde	50-00-0	1.97
n-Hexane	110-54-3	36.48
Lead & compounds	NA	0.03
Manganese compounds	NA	0.05
Mercury & compounds	NA	<.01
Methanol	67-56-1	<.01
Naphthalene	91-20-3	11.16
Nickel & compounds	NA	0.45
Phenol	108-95-2	0.07
Selenium & compounds	NA	0.04
Styrene	100-42-5	0.01
Toluene	108-88-3	24.20
Vinylidene chloride	75-35-4	0
Xylene	1330-20-7	23.84

NET EMISSIONS CHANGES

The initial step in the process of determining net emissions changes was summing the post-project potential emissions for each new unit, each modified unit, and each unit with increased

utilization. These totals exceeded the PSD levels of significance for NO_x, CO, VOC, SO₂, PM_{2.5}/PM₁₀, and GHG, requiring determination of net emissions changes.

Net emissions changes for the project were calculated by using the post-project potential emissions for each new unit, each modified unit, and each unit with increased utilization compared to the Baseline Actual Emissions (BAE) for each. The Projected Actual Emissions (PAE) for each new, modified, and increased-utilization unit were taken as PTE, except for SO₂. To remain under the 40 TPY SER for SO₂, the PAE for the SRUs will be based on 100 ppmv SO₂ and the PAE for the FCCU regenerator will be based upon 10 ppmv SO₂. (Reported actual SO₂ emissions have been well below these projected values.)

The BAE period for all pollutants was calendar years 2010 and 2011.

There were several contemporaneous projects:

- Numerous pipelines were constructed between the two HRMT refineries as part of the “integration” project.
- The DHTU at East Refinery was revamped to meet new diesel fuel sulfur standards.
- The CCR at East Refinery was upgraded to a higher throughput.
- Boilers 3 and 4 at the West Refinery have been shut down.
- Boiler 10 at the West Refinery was installed under a PSD permit; as a unit operating less than 2 years, BAE is equal to PTE, for a net change of zero in this latest expansion.
- Sulfur reduction projects: flare gas recovery at the West Refinery, NaSH/Amine Unit at the East Refinery, and sour gas fuel line interconnection; the BAE for fuel gas combustion units at the West Refinery uses NSPS Subpart J limits as required by Consent Decree.
- Coker blowdown project at West Refinery.
- “Benzap” (Mobile Source Air Toxics) Unit at East Refinery, which has been repurposed as the Naphtha Splitter Reboiler.
- Loading Terminal vapor combustion unit.
- The East and West Refinery wastewater treatment plants have been upgraded, or will be upgraded contemporaneous with the Project, resulting in VOC emissions reductions.
- Numerous older, grandfathered tanks have been replaced with newer tanks, mostly with floating roofs; despite the throughput increase, VOC emissions from tanks will decline from the BAE.

Baseline Actual Emissions

Unit	Point ID	NO _x TPY	CO TPY	VOC TPY	PM ₁₀ TPY	PM _{2.5} TPY	SO ₂ TPY	GHG TPY
East Refinery								
DHTU Charge Heater 1H-101	6156	3.29	12.9	0.84	1.16	1.16	0.20	20,414
CCR Charge Heater 10H-101	6163	24.5	19.7	1.29	1.78	1.78	0.30	31,251
CCR #2-1 Interheater 10H-102	6163	12.8	10.4	0.68	0.94	0.94	0.16	16,428
CCR #2-1 Interheater 10H-103	6163	6.31	5.11	0.33	0.46	0.46	0.08	8,103
CCR Stabilizer Reboiler 10H-104	6162	3.30	0.09	0.51	0.70	0.70	0.12	12,236
Naphtha Splitter Reboiler	6162	0.32	0.67	0.044	0.06	0.06	0.027	1,059
CCR Interheater #1 10H-113	39225	14.7	31.0	2.03	2.80	2.80	0.48	49,103
Boiler #1	6150	3.61	39.1	2.56	3.53	3.53	0.59	62,043
Boiler #2	6150	5.10	42.1	2.75	3.80	3.80	0.62	66,720
Boiler #3	6151	2.34	40.5	2.65	3.66	3.66	0.62	64,305
Boiler #4	6151	4.88	37.4	2.45	3.38	3.38	0.55	59,303
Sulfur Recovery Unit / Tail Gas Treating Unit #1	6152	0.36	37.2	0.014	0.02	0.02	0.90	345
Sulfur Recovery Unit / Tail Gas Treating Unit #2	36200	3.00	1.80	0.12	0.16	0.16	0.19	2,852
NHDS Charge Heater 02H-001	36195	3.46	0.04	0.42	0.58	0.58	0.10	10,259
NHDS Stripper Reboiler 02H-002	36198	2.84	0.38	0.37	0.52	0.52	0.09	9,063
CDU Atmospheric Tower Heater	6155	84.4	57.9	3.79	5.24	5.24	1.30	91,888
CDU Vacuum Tower Heater	6155	41.6	28.5	1.87	2.58	2.58	0.64	45,258
FCCU Charge Heater B-2	6158	33.3	18.3	1.20	1.65	1.65	0.31	20,414
FCCU Regenerator	6153	3.08	75.1	0.094	30.2	30.2	9.17	158,360
Unifiner Charge Heater H-1	6167	7.31	6.02	0.39	0.54	0.54	0.091	9,554
Scanfiner Charge Heater 12H-101	23133	1.20	0.01	0.092	0.13	0.13	0.023	2,234
Tanks	Multiple	-	-	3.19	-	-	-	62
Equipment Leaks		-	-	204	0.27	0.027	0	267
Wastewater Treatment	---	-	-	240	-	-	-	-
HEP (Loading Terminal)								
Tanks	Multiple	-	-	156	-	-	-	62
Loading/Unloading Racks (excluding Terminal)	---	-	-	3.62	-	-	-	-
Loading Terminal	6275	14.84	37.10	37.5	1.48	1.48	0.39	9,214
Fugitives	N/A	-	-	2.56	0.27	0.027	-	267

Baseline Actual Emissions - Continued

Unit	Point ID	NO _x TPY	CO TPY	VOC TPY	PM ₁₀ TPY	PM _{2.5} TPY	SO ₂ TPY	GHG TPY
West Refinery								
#7 Boiler	#7 Boiler	46.9	20.3	1.33	1.84	1.84	0	32,261
#8 Boiler	#8 Boiler	69.0	29.9	1.96	2.71	2.71	0	47,469
#9 Boiler	#9 Boiler	53.4	31.4	2.06	2.84	2.84	0	49,843
#10 Boiler	#10 Boiler	39.0	77.4	5.07	7.00	7.00	9.17	122,776
CDU Atmospheric Tower Heater	CDU H-1	112	85.1	5.57	7.70	7.70	30.9	135,020
CDU #1 Vacuum Tower Heater	CDU H-2	30.6	25.2	1.65	2.28	2.28	46.7	39,951
CDU #2 Vacuum Tower Heater	CDU H-3	8.97	7.39	0.48	0.67	0.67	2.7	11,723
Unifiner Charge Heater	Unifiner H-2	9.03	4.96	0.32	0.45	0.45	1.69	7,867
Unifiner Stripper Reboiler	Unifiner H-3	13.2	7.24	0.47	0.66	0.66	2.46	11,491
No. 2 Platformer Charge Heater	#2 Plat PH-3	8.20	4.50	0.29	0.41	0.41	1.53	7,138
No. 2 Platformer Charge Heater	#2 Plat PH-4	9.93	5.45	0.36	0.49	0.49	0.68	8,649
Coker Drum Charge Heater	Coker B-1	11.6	10.6	0.70	0.96	0.96	0.01	16,887
Coker Pre-Heater	Coker H-3	5.31	4.86	0.32	0.44	0.44	0.004	7,708
LEU Raffinate Mix Heater	LEU H101	7.31	4.01	0.26	0.36	0.36	1.68	6,363
LEU Extract Mix Heater	LEU H-102	32.6	29.8	1.95	2.70	2.70	167	47,303
LEU Hydrotreater Charge Heater	LEU H-201	9.16	5.03	0.33	0.45	0.45	2.10	7,977
MEK – Wax Free Oil Heater	MEK H-101	36.3	19.9	1.30	1.80	1.80	0	31,595
MEK – Soft Wax Heater	MEK H-2	13.1	9.00	0.59	0.81	0.81	3.40	14,282
Loading / Unloading Racks	Multiple	-	-	6.40	-	-	-	-
Tanks	Multiple	-	-	78.3	-	-	-	73
Fugitive VOC Leakage	---	-	-	168	1.68	0.11	-	198
Wastewater Treatment	---	-	-	196	-	-	-	-
TOTAL BASELINE ACTUAL EMISSIONS		792.15	883.36	1145.1	102.16	100.10	286.78	1,357,638

Post-Project Potential To Emit For NO_x, CO, VOC, PM₁₀, PM_{2.5}, and GHG / SO₂ Projected Actual Emissions

Unit	Point ID	NO _x TPY	CO TPY	VOC TPY	PM ₁₀ TPY	PM _{2.5} TPY	SO ₂ TPY	GHG TPY
East Refinery								
CCR Helper Heater	N/A	3.29	4.38	0.59	0.82	0.82	1.07	17,880
NHDS Helper Heater	N/A	1.31	1.75	0.24	0.33	0.33	0.43	7,152
DHTU Helper Heater	N/A	6.57	8.76	1.18	1.63	1.63	2.14	35,761
ROSE Heater	N/A	5.52	7.36	0.99	1.37	1.37	1.80	30,039
New Tanks	Multiple	-	-	1.20	-	-	-	29.0
Fugitives – New/modified Units	Multiple	-	-	23.5	-	-	-	347.5
DHTU Charge Heater 1H-101	6156	9.64	19.8	1.30	1.79	1.79	0.98	39,337
CCR Charge Heater 10H-101	6163	26.3	43.3	2.83	3.92	3.92	2.14	85,825
CCR #2-1 Interheater 10H-102	6163	66.4	36.4	2.39	3.30	3.30	1.8	72,236
CCR #2-1 Interheater 10H-103	6163	16.4	9.02	0.59	0.82	0.82	0.45	17,880
CCR Stabilizer Reboiler 10H-104	6162	18.6	30.7	2.01	2.77	2.77	1.51	60,793
Naphtha Splitter Reboiler	6162	13.1	27.9	1.77	2.45	2.45	1.34	53,641
CCR Interheater #1 10H-113	39225	33.9	55.9	3.66	5.06	5.06	2.76	110,858
Boiler #1	6150	30.6	84.0	5.50	7.60	7.60	4.15	166,644
Boiler #2	6150	30.6	84.0	5.50	7.60	7.60	4.15	166,644
Boiler #3	6151	30.6	84.0	5.50	7.60	7.60	4.15	166,644
Boiler #4	6151	30.6	84.0	5.50	7.60	7.60	4.15	166,644
Sulfur Recovery Unit / Tail Gas Treating Unit #1	6152	4.91	99.0	0.13	0.18	0.18	14.0	3,604
Sulfur Recovery Unit / Tail Gas Treating Unit #2	36200	10.6	4.36	0.29	0.39	0.39	9.84	7,787
NHDS Charge Heater 02H-001	36195	8.54	14.1	0.92	1.27	1.27	0.69	27,893
NHDS Stripper Reboiler 02H-002	36198	9.68	15.9	1.04	1.44	1.44	0.79	31,612
CDU Atmospheric Tower Heater *	6155	84.4	57.9	5.86	8.09	8.09	4.42	143,042
CDU Vacuum Tower Heater	6155	52.6	36.1	2.36	3.26	3.26	1.78	71,521
FCCU Charge Heater B-2	6158	108	59.5	3.90	5.38	5.38	2.94	118,010
FCCU Regenerator	6153	33.2	505	0.094	74.5	74.5	23.1	293,591
Unifiner Charge Heater H-1	6167	18.4	15.1	0.99	1.37	1.37	0.75	30,039
Scanfiner Charge Heater 12H-101	23133	7.73	9.09	0.60	0.82	0.82	0.45	18,023
Tanks	Multiple	-	-	3.19	-	-	-	80.5
Equipment Leaks	Multiple	-	-	211	0.27	0.027	-	334
Wastewater Treatment	---	-	-	240	-	-	-	-

*NOTE: Since PAE cannot be less than BAE, higher emission rates are being shown for this unit's PAE. Permit emission limits are lower than PAE.

Post-Project Potential To Emit For NO_x, CO, VOC, PM₁₀, PM_{2.5}, and GHG / SO₂ Projected Actual Emissions - Continued

Unit	Point ID	NO _x TPY	CO TPY	VOC TPY	PM ₁₀ TPY	PM _{2.5} TPY	SO ₂ TPY	GHG TPY
West Refinery								
PDA/ROSE Heater	N/A	10.0	13.3	1.79	2.48	2.48	3.25	54,356
Hydrogen Plant Reformer Heater	---	16.4	21.9	2.95	4.08	4.08	5.34	89,401
Hydrogen Plant Process Emissions	---	-	4.06	-	-	-	-	75,991
New Tanks	---	-	-	25.8	-	-	-	29.0
New Fugitives	---	-	-	5.22	-	-	-	258
#7 Boiler	#7 Boiler	125	54.1	3.54	4.90	4.90	2.67	107,282
#8 Boiler	#8 Boiler	125	54.1	3.54	4.90	4.90	2.67	107,282
#9 Boiler	#9 Boiler	92	54.1	3.54	4.90	4.90	2.67	107,282
#10 Boiler	#10 Boiler	39.0	77.4	5.07	7.00	7.00	9.17	153,484
CDU Atmospheric Tower Heater	CDU H-1	151	115	7.56	10.4	10.4	30.9	228,868
CDU #1 Vacuum Tower Heater	CDU H-2	35.0	28.9	1.89	2.61	2.61	46.7	57,217
CDU #2 Vacuum Tower Heater	CDU H-3	18.9	15.6	1.02	1.41	1.41	2.68	30,897
Unifiner Charge Heater	Unifiner H-2	24.1	13.2	0.87	1.20	1.20	1.69	26,248
Unifiner Stripper Reboiler	Unifiner H-3	39.1	21.5	1.41	1.94	1.94	2.46	42,555
No. 2 Platformer Charge Heater	#2 Plat PH-3	23.8	13.1	0.86	1.18	1.18	1.53	25,962
No. 2 Platformer Charge Heater	#2 Plat PH-4	19.6	16.2	1.06	1.46	1.46	1.91	32,041
Coker Drum Charge Heater	Coker B-1	23.7	21.6	1.42	1.96	1.96	1.07	42,913
Coker Pre-Heater	Coker H-3	12.7	11.6	0.76	1.05	1.05	0.57	23,030
LEU Raffinate Mix Heater	LEU H101	14.7	8.08	0.53	0.73	0.73	1.68	16,021
LEU Extract Mix Heater	LEU H-102	59.1	54.1	3.54	4.90	4.90	167	107,282
LEU Hydrotreater Charge Heater	LEU H-201	14.7	8.08	0.53	0.73	0.73	2.10	16,021
MEK – Wax Free Oil Heater	MEK H-101	53.2	29.2	1.91	2.64	2.64	1.44	57,932
MEK – Soft Wax Heater	MEK H-2	25.8	17.7	1.16	1.60	1.60	3.40	35,045
Loading / Unloading Racks	Multiple	-	-	6.4	0.90	0.11	-	-
Tanks	Multiple	-	-	78.3	-	-	-	94.5
Equipment Leaks	---	-	-	169	1.68	1.68	0	248
Wastewater Treatment	---	-	-	196	-	-	-	-

Post-Project Potential To Emit For NO_x, CO, VOC, PM₁₀, PM_{2.5}, and GHG / SO₂ Projected Actual Emissions - Continued

Unit	Point ID	NO _x TPY	CO TPY	VOC TPY	PM ₁₀ TPY	PM _{2.5} TPY	SO ₂ TPY	GHG TPY
HEP (Loading Terminal)								
New Tanks	Multiple	-	-	22.1	-	-	-	29.0
New Equipment Leaks	16	-	-	5.91	-	-	-	348
Loading/Unloading Racks (excluding Terminal)	---	-	-	3.62	-	-	-	-
Tanks	Multiple	-	-	156	-	-	-	10.4
Loading Terminal	6275	14.8	37.1	37.5	1.48	1.48	0.39	11,518
Fugitives	16	-	-	2.56	0.27	0.027	-	334
TOTAL POST-PROJECT EMISSIONS		1,599.09	2,087.24	1,294.88	218.03	216.75	383.07	3,393,823

Project Emissions Changes

Pollutant	PAE TPY	BAE TPY	Difference TPY	PSD Levels of Significance, TPY	Netting Required?
NO _x	1,599.09	791.89	807.20	40	Yes
CO	2,087.24	883.41	1,203.83	100	Yes
VOC	1,294.88	1146.33	148.55	40	Yes
PM ₁₀	218.03	103.05	114.98	15	Yes
PM _{2.5}	216.75	100.20	116.55	10	Yes
SO ₂	383.07	287.07	96.00	40	Yes
GHG	3,393,823	1,357,638	2,036,185	75,000	Yes

PSD Netting

Project	NO _x TPY	CO TPY	VOC TPY	PM ₁₀ TPY	PM _{2.5} TPY	SO ₂ TPY	GHG TPY
Projected Actual Emissions	1,599.09	2,087.24	1,294.88	218.03	216.75	383.07	3,393,823
Baseline Actual Emissions	-791.89	-883.41	-1146.33	-103.05	-100.20	-287.07	-1,357,638
East CDU Atmospheric Tower Heater	-51.8	-14.5	--	--	--	--	--
East Removed Tanks	--	--	-0.79	--	--	--	-62
East Wastewater Treatment Improvements	--	--	-20.0	--	--	--	--
HEP Removed Tanks	--	--	-38.8	--	--	--	--
HEP Removed Thermal Oxidizer	-2.47	-6.18	-8.00	-0.56	-0.56	--	--
HEP Added Tanks	--	--	8.33	--	--	--	10.4
Vapor Combustor	14.8	37.1	37.45	1.48	1.48	0.39	9,214
West Wastewater Treatment Improvements	--	--	-20.0	--	--	--	--
West Removed Tanks	--	--	-57.4	--	--	--	--
West Heaters – Subpart J to Subpart Ja Fuel	--	--	--	--	--	-42.79	--
West Boilers 3 and 4 Removed	-196	-57.7	-3.78	-5.22	-5.22	-20.7	-91,495
West PDA Propane Compressor Electrified	-0.86	-3.44	-1.00	-0.17	-0.17	-0.01	-1,089
West Unifiner H2 Recycle Compressor Electrified	-0.35	-4.62	-1.34	-0.23	-0.23	-0.01	-1,462
West Plat PH-1/2 Heater Removed	-31.5	-17.3	-1.13	-1.56	-1.56	-5.89	-27,415
West Plat PH-5 Heater Removed	-17.4	-11.3	-0.74	-1.02	-1.02	-0.01	-17,861
West Plat PH-6 Heater Removed	-7.69	-4.81	-0.32	-0.44	-0.44	-0.01	-7,632
West Plat PH-7 Heater Removed	-3.65	-2.00	-0.13	-0.18	-0.18	-0.68	-3,177

Project	NOx TPY	CO TPY	VOC TPY	PM₁₀ TPY	PM_{2.5} TPY	SO₂ TPY	GHG TPY
West #2 Cooling Tower Circulating Pump Electrified	-0.74	-2.94	-0.85	-0.15	-0.15	--	-189
West #3 Cooling Tower Circulating Pump Electrified	-1.78	-7.11	-2.07	-0.36	-0.36	-0.01	-19.3
West #6 Cooling Tower Spray Pump Electrified	-2.04	-8.14	-2.37	-0.41	-0.41	-0.01	--
West #6 Cooling Tower Circulating Pump Electrified	-0.83	-3.32	-0.97	-0.17	-0.17	--	--
West #3 Cooling Tower Replacement	--	--	-3.68	-5.12	-0.03	--	--
	--	--	3.68	3.30	0.02	--	--
West #10 Boiler	39.0	77.4	5.07	7.00	7.00	9.17	122,788
NET EMISSIONS CHANGES	543.89	1,175	39.71	111.17	114.55	35.44	2,017,796
Full PSD Review Required?	Yes	Yes	No	Yes	Yes	No	Yes

VI. BEST AVAILABLE CONTROL TECHNOLOGY

Since the only new units in this permit have only VOC emissions, and VOC emissions increases are below PSD levels of significance, BACT requirements are analyzed in PSD construction permits for the East and West refineries.

VII. AMBIENT AIR QUALITY IMPACTS

The only added emissions in this permit are VOC emissions, which are below PSD levels of significance. There are no ambient modeling requirements applicable to this permit for the loading terminal only. Ambient impacts are analyzed in PSD construction permits for the East and West refineries, Permits No. 2012-924-C (M-2)(PSD) and 2010-924-C (M-3)(PSD).

VIII. INSIGNIFICANT ACTIVITIES

The insignificant activities identified and justified on Part 1b of the forms in the application and duplicated below. Appropriate recordkeeping is required for those activities indicated below with an asterisk.

Activities with potential emissions of 5 TPY or less. None identified but may be used in the future.

IX. OKLAHOMA AIR POLLUTION CONTROL RULES

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

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

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]
Subchapter 3 enumerates the primary and secondary ambient air quality standards and the significant deterioration increments. At this time, all of Oklahoma is in "attainment" of these standards.

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

OAC 252:100-8 (Permits for Part 70 Sources) [Applicable]
Part 5 includes the general administrative requirements for Part 70 permits. Any planned changes in the operation of the facility that result in emissions not authorized in the permit and that exceed the “Insignificant Activities” or “Trivial Activities” thresholds require prior notification to AQD and may require a permit modification. Insignificant activities refer to those individual emission units either listed in Appendix I or whose actual calendar year emissions do not exceed the following limits.

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

Emission limitations and operational requirements necessary to assure compliance with all other applicable requirements for all sources are taken from the initial TV permit, from the various modifications based on the initial TV permit, from the TVR and construction permit applications, Civil Action No. 08-CV 020-D, or are developed from the applicable requirement.

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 (PM)) [Applicable]
Section 19-4 regulates emissions of PM from new and existing fuel-burning equipment, with emission limits based on maximum design heat input rating. Fuel-burning equipment is defined in OAC 252:100-19 as any internal combustion engine or gas turbine, or other combustion device used to convert the combustion of fuel into usable energy. The vapor combustor unit at the terminal is not fuel-burning equipment under the state definition and is not affected by this rule.

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
No discharge of greater than 20% opacity is allowed except for short-term occurrences that 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. The VCU is a potential source of visible emissions at this facility. Proper operation of the VCU should maintain compliance.

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. Heavy traffic areas, including the racks and the offices, are paved. Vehicular traffic in the unpaved areas is greatly restricted for safety reasons. Under normal operating conditions, this facility will not cause fugitive dust problems, therefore it is not necessary to require specific precautions to be taken.

OAC 252:100-31 (Sulfur Compounds) [Applicable]

Part 5 covers new equipment standards. Since the VCU is not “fuel-burning equipment,” it is not subject to Part 5.

OAC 252:100-33 (Nitrogen Oxides) [Applicable]

This subchapter limits new gas-fired and liquid-fired fuel-burning equipment with rated heat input greater than or equal to 50 MMBTUH to emissions of 0.20 and 0.30 lbs of NO_x per MMBTU, three-hour average, respectively. Since the VCU is not “fuel-burning equipment,” it is not subject to this rule.

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

None of the following affected processes are part of the HEP facility: gray iron foundry, blast furnace, basic oxygen furnace, petroleum catalytic reforming unit, or petroleum catalytic cracking unit.

OAC 252:100-37 (Volatile Organic Compounds) [Parts 3 & 7 Applicable]

Part 3 concerns the control of volatile organic compounds.

Section 37-15 (a) requires that all storage tanks with capacity greater than 40,000 gallons and storing a VOC with a vapor pressure greater than 1.5 psia shall be pressure vessels or shall be equipped with one of the following vapor-loss control devices.

(1) They shall be of EFR or fixed roof with IFR design, with the roof floating on the liquid surface at all times and equipped with a closure seal between the roof edge and the tank wall. Floating roofs are not suitable control for liquids with vapor pressure greater than 11.1 psia. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(2) They shall have an 85% efficient vapor recovery system and a vapor disposal system. All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(3) They shall have other equipment or methods with efficiency at least equal to those devices listed above.

All of the tanks in EUG 1 have capacities greater than 40,000 gallons and are of IFR design. Although they do not all store VOC with vapor pressure greater than 1.5 psia, they satisfy the requirements of this section for doing so.

All of the tanks in EUG 2 have capacities greater than 40,000 gallons and are of EFR design. Although they may not always store VOC with vapor pressure greater than 1.5 psia, they satisfy the requirements of this section for doing so.

Many of the tanks in EUG 3 have capacities greater than 40,000 gallons, but none of them stores liquid with vapor pressure greater than or equal to 1.5 psia. All of these tanks are exempt from the provisions of Section 37-15 per §37-4(a).

Tanks in EUG 5 have capacities greater than 40,000 gallons and are IFR tanks subject to Subpart Kb. These tanks are exempt from the provisions of Section 37-15 per §37-15(c).

Tank #114 in EUG 7 has a capacity greater than 40,000 gallons and is of EFR design. It does not store VOC with vapor pressure greater than 1.5 psia, but it does satisfy the requirements of this section for doing so.

Section 37-15 (b) requires storage tanks 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 per §37-15(a)(2). All of the tanks identified in the discussion of Subsection 15(a) satisfy the submerged fill condition. Tank #419 is listed as an Insignificant Activity. It has capacity less than 40,000 gallons but greater than 400 gallons and stores gasoline, whose vapor pressure exceeds 1.5 psia. It has submerged fill and satisfies the requirements of this section.

Section 37-16 establishes standards for the loading of volatile organic compounds. Loading racks in EUG 14, including black oil railcar loading, black oil truck loading, diesel railcar loading and gas oil truck loading all involve material with vapor pressure well below 1.5 psia, and are exempt from the provisions of this section per §37-4(a).

Section 37-16 (a) contains requirements for loading facilities with throughput greater than 40,000 gallons per day. These conditions include a vapor collection and disposal system unless all trucks or trailers are bottom-loaded with hatches closed. Additionally, no drainage is allowed from the loading device after disconnection. The racks of EUG 15, including butane truck loading, propylene railcar and truck loading, gasoline and diesel truck loading and propane truck loading all have throughput capability of 40,000 gallons per day. Each of these processes is bottom-loading with hatches closed and all connectors shut automatically or are drained before disconnection. The facility should be considered to be exempt from these provisions. Although Section 37-16 (c) does not specifically exempt sources subject to MACT Subpart CC, it does exempt those subject to MACT Subpart R or NSPS Subpart XX. The rack is subject to MACT Subpart CC, which specifically requires compliance with the standards of both MACT Subpart R and NSPS Subpart XX. The HSR rack does not load trucks or railcars, so it is not subject to §16(a).

Part 5 limits the organic solvent content of coating or other operations. This facility does not normally conduct coating or painting operations except for routine maintenance of the facility and equipment, which is not an affected operation.

Part 7 regulates specific processes.

Section 37-36 requires fuel-burning equipment to be operated and maintained so as to minimize emissions. The VCU is not considered to be fuel-burning equipment and is not an affected source.

Section 37-37 concerns water separators that receive water containing more than 200 gallons per day of VOC. All wastewater processing remained with HRMT.

OAC 252:100-39 (VOC in Non-attainment Areas)

[Applicable]

Part 3 affects petroleum refinery operations.

Section 39-15 concerns petroleum refinery equipment leaks and is frequently referred to as LDAR, for Leak Detection and Reporting. It applies to all components that might have leaks of VOC when tested by EPA Reference Method (RM) 21 as found in the NSPS regulations of 40 CFR 60. For the purposes of this section, VOC with vapor pressure less than 0.0435 psia is exempt. Standards and operating procedures are set out in §39-15(c), as summarized following.

- 1) Monitor per Section (f), record leaking components and tag each component. Repair and retest leaking components and identify those that cannot be repaired until turnaround. Seal all lines ending with a valve with a second valve, flange, plug, or cap.
- 2) AQD may require remedial action based on the number and severity of tagged components awaiting repair.
- 3) Pipeline and pressure relief valves shall be marked in a manner obvious to both monitoring and DEQ personnel.

Monitoring requirements are found in §39-15(f), as summarized following.

- 1) Monitoring shall consist of annual RM 21 testing for pump seals, pipeline valves in liquid service, and drains, quarterly RM 21 testing for compressor seals and for pipeline valves and pressure relief valves in gas service, and weekly visual monitoring for all pump seals. Further, monitoring shall occur within 24 hours for any pump seal from which VOC liquids are observed dripping and for any relief valve that has vented to the atmosphere. Any leaking component shall be monitored immediately after repair.
- 2) Vapor recovery devices, inaccessible valves, storage tank valves, valves not externally regulated, and pressure relief devices connected to a flare header are exempt from (1) provided that inaccessible valves will be monitored during turnarounds.
- 3) Any leaking component not immediately repaired shall have a readily visible dated identifying tag attached until it is repaired.

Record keeping and reporting requirements are identified in §39-15(g) and (h), and will be more fully enumerated in the Specific Conditions of the permit. The facility states that it is in compliance with all of the requirements listed above. The new propane loading unit, when constructed, will be subject to 39-15.

Section 39-16 concerns petroleum refinery process unit turnarounds and outlines procedures to be used during the planned shutdown, inspection, repair, and restart of a unit. VOC in the unit shall be routed to a flare or vapor recovery system until the unit is blown down to pressure compatible with the control device pressure. The system may then be purged using appropriate materials. The unit may not be vented to atmosphere until unit pressure is less than 5 psig. VOC may not be emitted to the atmosphere through any control device unless it is burned in a smokeless flare or equivalent device, except for special circumstances. Written notice of the unit to be shut down, the date of shut down and the amount of VOC emissions anticipated shall be provided to AQD at least 15 days in advance. Scheduled turnarounds may be exempted from the control requirements during non-oxidant season if the required notice makes a specific request to that effect. The facility has provided the appropriate notices for past turnarounds and is in compliance.

Section 39-17 concerns non-condensable VOC emitted from equipment used in producing vacuums. It is not applicable to the tank farm and product loading operation.

Section 39-18 concerns refinery effluent water separators. These will not become part of the HEP facility.

Part 5 concerns petroleum processing and storage.

Section 39-30 affects petroleum liquid storage in external floating roof EFR tanks of capacity greater than 40,000 gallons located in Tulsa County. While the facility contains numerous tanks fitting this description, each tank is subject to an NSPS subpart and/or to MACT Subpart CC. Tanks subject to NSPS Subparts K, Ka, or Kb, are exempt from this section per §39-30(b)(3). Tanks subject to NESHAP MACT Subpart CC are exempt from this section per §39-30(b)(4). Thus, all tanks potentially subject to §39-30 are exempt.

Part 7 contains rules affecting specific processes.

Sections 39-41(a) & (b) extend the “new” tank requirements of OAC 252:100-37-15 to existing tanks that store gasoline or other organic materials with vapor pressure greater than 1.5 psia. See the 37-15 discussion above. This facility meets these requirements.

Section 39-41(c) contains provisions concerning loading of VOC. NESHAP 40 CFR 63 Subpart CC had an effective date of August 18, 1998, for the loading facility. This MACT Standard references both NESHAP MACT Subpart R and NSPS Subpart XX. Because these subparts impose conditions at least as stringent as this paragraph, and because the facility is in compliance with Subpart CC, the current requirements should be satisfied.

Section 39-41(d) contains provisions concerning transports that load and deliver VOC. Transports must be vapor tight or must deliver vapors to a recovery/disposal system. Both criteria are met. Testing of the tank trucks for vapor tightness must follow the standards set forth in Appendix B of Control of VOC Leaks from Gasoline Tank Trucks and Vapor Collection Systems, EPA 450/2-78-051. The facility appears to be in compliance.

Subsection 39-41(e) contains provisions pertinent only in Tulsa County. Storage system requirements are extended to gasoline or VOC storage tanks with capacities between 2,000 and 40,000 gallons. No tanks at this facility meet these criteria. It also requires that the stationary loading facility be checked annually using EPA Method 21. Leaks greater than 5,000 ppmv shall be repaired within 15 days. The facility appears to be in compliance. Finally, there are additional controls with respect to transport vessels. The vessels must be maintained vapor tight and must be capable of receiving and storing vapors for ultimate delivery to a vapor recovery/disposal system. Any defect that impairs vapor tightness must be repaired within five days. Certification of vapor tightness and of repairs must be provided and no vessel shall be loaded without demonstrating the proper certification. DEQ may perform inspections of vapor tightness and may require owner/operators to make necessary repairs. This facility and the transports loading there have been in compliance.

Section 39-42 concerns metal degreasing. Sections (b) and (c) cover vapor type and conveyORIZED degreasing, neither of which is present at this facility. Section (a) covers cold cleaning units, requiring a cover on the unit that can be easily operated with one hand, an internal drain board that allows the cover to close if practical; if not practical, provide external drainage, and that a conspicuous label summarizing proper operation be attached to each such unit. The operating standards for the label are enumerated in Paragraph (a)(2).

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 Quality Rules are not applicable to this facility.

OAC 252:100-11	Alternative 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	Feed & Grain Facility	not in source category
OAC 252:100-47	Municipal Solid Waste Landfills	not in source category

X. FEDERAL REGULATIONS

PSD, 40 CFR Part 52 [Applicable]
 Emissions of several regulated pollutants exceed the major source level of 100 TPY for a listed source. PSD review of VOC emissions from the proposed project is limited to showing that the net emissions change is below PSD levels of significance. PSD will apply to any future project whose added emissions exceed the significance levels: CO 100 TPY, NO_x 40 TPY, SO₂ 40 TPY, PM_{2.5} 10 TPY, PM₁₀ 15 TPY, VOC 40 TPY, or GHG 75,000 TPY.

NSPS, 40 CFR Part 60 [Subparts K, Kb, UU, and GGGa Are Applicable]
Subparts K, Ka, Kb (VOL Storage Vessels)
 There are many tanks to consider. The earliest effective date of any of these subparts is June 11, 1973. All but ten of the hydrocarbon storage tanks were constructed before that date. They have not been modified to sufficient extent to meet the construction or modification criteria, and are not affected sources. Subpart Kb excludes vessels storing organic liquids with vapor pressures below 3.5 kPa (0.5 psia).

Subpart K

Tank #63 in EUG 3 has capacity greater than 40,000 gallons, but less than 65,000 gallons. Because the tank was constructed in 1973, it is not subject under either set of criteria described in § 60.110(c).

Subpart Ka

None of the tanks was constructed after May 18, 1978, and before July 23, 1984, within the applicability window for Subpart Ka.

Subpart Kb

The reconstructed Tank 7 and Tank 445 in EUG-5 are subject to Subpart Kb. Tanks 9 and 16 in EUG 3, Tanks 4, 31, and 605 in EUG 5, and Tanks 474, 475, and 476 in EUG 20 were constructed after July 23, 1984. Tanks 9, 16, and 4 store liquids with vapor pressure well below the thresholds set in §111b(b), and are not affected facilities. Tank 31 is a fixed roof tank with carbon canisters on both the high- and low-pressure vents, satisfying the requirements of §112b(a)(3). Tank 605 meets the standards of 40 CFR 60.112b(a) with an internal floating roof (IFR) with a mechanical shoe seal, and satisfies the requirements of §112b(a)(1)(i – ix). Tanks 474, 475, and 476 meet these standards with external floating roofs (EFR) with primary and secondary seals, and satisfy the requirements of §112b(a)(2)(i - iii).

Subpart UU (Asphalt Processing and Asphalt Roofing Manufacture)

Affected facilities at refineries are each asphalt storage tank and asphalt blowing still. The tanks in EUG-3A are subject to Subpart UU.

Subpart XX (Bulk Gasoline Terminals)

This subpart applies to loading racks at bulk gasoline terminals for which construction or modification commenced after December 17, 1980. The four-spot rack was constructed in 1951, and is not an affected facility. Any work performed on the rack since 1980 has been insufficient to meet the definition of “modification.” The new VCU did not increase VOC emissions on a lb/hr basis.

Subpart GGGa (VOC Equipment Leaks in Petroleum Refineries)

This subpart affects each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in VOC service at a process unit, which commenced construction or modification after November 7, 2006, and which is located at a petroleum refinery. This subpart defines “process unit” as “components assembled to produce intermediate or final products from petroleum, unfinished petroleum derivatives, or other intermediates: a process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.” The product loading terminal and the propane loading unit are not “process units” as defined by Subpart GGGa but the new inline gasoline blender is.

Subpart QQQ (VOC from Petroleum Refinery Wastewater Systems)

Affected facilities include each individual drain system, each oil-water separator, and each aggregate facility, where aggregate facility is the subject of further definition. Facilities constructed, modified, or reconstructed after May 4, 1987, are subject to the requirements of this subpart. Tanks subject to NSPS Subpart Kb are not subject to the standards of Subpart QQQ, but they are subject to overlap provisions in MACT Subpart CC. Specific Conditions address these overlaps. There are no wastewater handling systems in the HEP facility.

NESHAP, 40 CFR Part 61

[Not Applicable]

Of the pollutants listed in 40 CFR 61 (asbestos, benzene, beryllium, coke oven emissions, inorganic arsenic, mercury, radionuclides, and vinyl chloride), only asbestos and benzene are emitted by this facility. Several subparts cover emissions of benzene but all product streams are less than the 10% threshold.

Subpart J (Equipment Leaks) The overhead from the reformat splitter will contain >10% benzene, but the facility is only required to comply with the MACT CC Equipment Leak provisions as described in the overlap provisions found in 40 CFR 63.640(p).

Subpart L (Coke By-Product Recovery) This facility is not an affected source.

Subpart Y (Benzene Storage Vessels) This facility is not an affected source.

Subpart BB (Benzene Transfer Operations) This facility is not an affected source.

Subpart FF (Benzene Waste Operations) This facility is connected to a petroleum refinery but does not include any waste handling operations.

NESHAP, 40 CFR Part 63

[Subpart CC Applicable]

Subpart R (Gasoline Distribution Facilities)

While the gasoline loading rack did not satisfy the 40 CFR 63.640(a) criteria for being an affected facility under this subpart, it is an affected facility under Subpart CC, the standards for which are found in Subpart R.

Subpart CC (Petroleum Refineries)

Various process units and related emission points at petroleum refineries may be affected sources. They must be located at a plant site that is a major source per §112(a) of the Clean Air Act and they must emit or have equipment containing or contacting any of the organic HAP listed in Table 1 of the subpart. Table 1 contains only 28 chemicals, including meta-, ortho-, para-, and mixed isomers of both cresol and xylene. Organic HAP, as used in this subpart, refers only to chemicals on this list of 28. HRMT is an affected facility, and HEP is connected to it as a “support facility.”

- (c)(2) Storage vessels associated with petroleum refining process units. Group 1 storage vessels are required to comply with §§63.119 through 63.121 of Subpart G except as provided for in §63.646(b) through (l). Group 1 storage vessels for an existing source are those vessels with design capacity at least 177 m³ (46,758 gallons), storing a liquid with a maximum true vapor pressure at least 10.4 kPa (1.5 psia) and annual average true vapor pressure at least 8.3 kPa (1.2 psia), and storing a liquid with an annual average organic HAP concentration greater than 4 percent by weight. Subpart G is the MACT for Process Vents, Storage Vessels, Transfer Operations, and Wastewater at Synthetic Organic Chemical Manufacturing Industries (SOCMI). Most of the exceptions are simply substitute language to properly identify references and terminology; any substantive exceptions will be identified in the Specific Conditions of this permit. The sections cited essentially repeat the language of NSPS Subpart Kb. The compliance date for new tanks is first operation, and the compliance date for all existing tanks was August 18, 2005.

Because of overlap provisions to conform treatment of storage vessels with other NSPS or NESHAP subparts, each EUG containing storage vessels is addressed separately.

EUG 1 - Group 1 IFR tanks. All tanks, including those subject to NSPS Subpart K or Ka, demonstrate compliance through MACT CC requirements.

EUG 2 - Group 1 EFR tanks. Same as EUG 1 requirements.

EUG 3 - Group 2 fixed roof tanks. Same as EUG 1 requirements, except that NSPS Subpart K and Ka tanks are included only if they are not subject to control standards of those subparts.

EUG 5 - IFR tanks subject to NSPS Subpart Kb. Compliance with Subpart Kb is sufficient.

EUG 7 - Group 2 EFR tank(s). Same as EUG 1 requirements, although this EUG contains no NSPS tanks.

- (c)(5) Gasoline loading racks classified under SIC code 2911 shall comply with the standards of 40 CFR 63 Subpart R, with the only exception relating to the definition of organic HAP. The vapor combustor device requires a continuous parameter monitoring system (CPMS), according to 40 CFR 63.427.
- (c)(7) Storage vessels and equipment leaks associated with a bulk gasoline terminal or pipeline breakout station classified under SIC code 2911 contiguous to and under common control with a refinery. The standards for such equipment are recited in the discussions of §§(c)(2) and (c)(4) preceding.
- (c)(4) Equipment leaks from petroleum refining process units. The standards for all equipment are found in 40 CFR 60 Subpart VV, with certain minor exceptions. Among these are the necessary corrections to definitions of organic HAP as found in MACT CC and the requirement that all records be maintained for at least five years. Exceptions as to new sources, hydrogen service, and others are described in the Specific Conditions. By the overlap provisions, equipment which is subject to NSPS Subpart GGGa shall comply with that subpart instead of MACT CC.

The proposed new propane loading unit will not be subject to Subpart CC since the propane has negligible HAP content.

Subpart UUU (Petroleum Refineries – Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Plant Units). None of these units are part of the HEP facility.

Subpart EEEE (Organic Liquids Distribution (Non-gasoline)) concerns those organic HAP listed in Table 1 of the subpart and handling equipment, including storage tanks, transfer racks, equipment components, and transport vehicles while at the transfer racks. Criteria described in Table 2 of the subpart indicate that tanks with capacity less than 5,000 gallons are not affected. Except for the loading rack, all components of the HSR loading project are already covered under MACT CC, and are thus exempt from Subpart EEEE per 40 CFR 63.2338(c)(1). Because the rack is not subject to any of the emission limits in Table 2 of this subpart, it is not subject to any other standard except for initial notification under §63.2382(b)(2).

CAM, 40 CFR Part 64 [Applicable]
Compliance Assurance Monitoring (CAM) 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 of 100 TPY

The VCU is subject to the standards of 40 CFR 63 Subpart CC. Provisions for monitoring contained in these subparts is considered presumptively acceptable monitoring in accordance with 40 CFR 64.4(b)(4).

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Applicable]
Naturally occurring hydrocarbon mixtures, prior to entry into a natural gas processing plant or a petroleum refining process unit, including condensate, crude oil, field gas, and produced water, are exempt for the purpose of determining whether more than a threshold quantity of a regulated substance is present at the stationary source. Listed materials produced and held for sale as fuel are also exempt. HRMT filed a Risk Management Plan with the EPA on June 21, 1999, and filed a revised and updated plan on June 21, 2004. EPA's file number is 1000 0014 6567.

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

XI. COMPLIANCE

Tier Classification and Public Review

This application has been classified as **Tier II** based on the request for a construction permit for a “significant” modification. The applicant published the “Notice of Filing Tier II Application” in *The Tulsa Business & Legal News* on June 2, 2014. A draft of this permit was also made available for public review for a period of 30 days as stated in another newspaper announcement on December 23, 2014, and was available for review on the Air Quality section of the DEQ web page at <http://www.deq.state.ok.us>.” The permit was approved for concurrent public and EPA review; the draft/proposed permit was also submitted to EPA for a 45-day review period. No comments were received from the public. EPA submitted several comments which have been acted on where appropriate. Documentation of comments and responses has been placed in the permit files.

This facility is not located within 50 miles of the border with a contiguous state.

Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web page: [www.deq.state.ok.us/](http://www.deq.state.ok.us).

Fee Paid

Part 70 source Title V operating permit minor modification application fee of \$3,000.

XII. SUMMARY

The facility has demonstrated the ability to comply with the requirements of the several air pollution control rules and regulations. Ambient air quality standards are not threatened at this site. Issuance of the permit is recommended.

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

**Holly Refining & Marketing Company
Tulsa Refinery**

Permit Number 2012-924-C (M-3)(PSD)

The permittee is authorized to construct in conformity with the specifications submitted to the Air Quality Division (AQD) on May 2, 2014, The Evaluation Memorandum dated April 20, 2015, explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating limitations or permit requirements. Commencing construction or continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein.

SPECIFIC CONDITION 1

The permittee shall be authorized to operate the affected facilities noted in this permit continuously (24 hours per day, every day of the year) subject to the following conditions. Records necessary to show compliance with each of the requirements below must be maintained.

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

- a. The following tanks have the throughput limits specified below.

Tank No.	EUG	Throughput Limit
4	5	45,600,000 barrels/year
9	3	19,000,000 barrels/year
16	3	19,000,000 barrels/year
31	5	430,080 barrels/year

SPECIFIC CONDITION 2

Standards for affected Emission Unit Groups (EUG).

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

EUG 1 MACT CC Group 1 Storage Vessels - Internal Floating Roof (IFR)

These storage vessels are regulated under 40 CFR 63 Subpart CC (MACT CC) as Group 1 Storage Vessels and are limited to the existing equipment as it is.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
1	6173	1949	48'	140'	130,000
2	6174	1949	48'	140'	131,000
3	6175	1949	48'	140'	130,000
8	6179	1949	48'	140'	130,000
14	6182	1915	30'	115'	55,000
18*	6246	1910	30'	96'	37,500
442	6220	1923	30'	53'	11,700

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
460	6232	1927	40'	119'	80,000
461	6233	1927	40'	119'	80,000
464	6234	1927	40'	119'	80,000
465	6235	1927	40'	119'	80,000
466	6236	1927	40'	119'	80,000
467	6237	1927	40'	119'	80,000
471	6239	1927	40'	119'	80,000

- a. The permittee shall comply with MACT Subpart CC for the affected storage vessel including but not limited to:
 - 1. § 63.642 General Standards
 - 2. § 63.646 Storage Vessel Provisions
- b. During the course of this permit, these tanks may switch from Group 1 to Group 2 service and back per the requirements of MACT Subpart CC.
- c. Recordkeeping is required per 40 CFR 63.654(i). Records include dimensions and capacity, records of inspections, and extensions. [40 CFR 63.654(i)]
- d. Reporting is required per 40 CFR 63.654(g) and (h), including periodic reports and notifications prior to refilling. [40 CFR 63.654(g) and (h)]

EUG 2 MACT CC Group 1 Storage Vessels - External Floating Roof (EFR)

These storage vessels are regulated under 40 CFR 63 Subpart CC (MACT CC) as Group 1 Storage Vessels and are limited to the existing equipment as it is.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity (barrels)
601	6276	1951	48'	55'	18,500
602	6277	1951	48'	40'	9,700

- a. The permittee shall comply with MACT CC for the affected storage vessel including but not limited to:
 - 1. § 63.642 General Standards
 - 2. § 63.646 Storage Vessel Provisions
- b. Per OAC 252:100-39-30(b)(4), these storage vessels are exempt from OAC 252:100-39-30.
- c. Recordkeeping is required per 40 CFR 63.654(i). Records include dimensions and capacity, records of inspections, and extensions. [40 CFR 63.654(i)]

- d. Reporting is required per 40 CFR 63.654(g) and (h) including periodic reports, and notifications prior to refilling. [40 CFR 63.654(g) and (h)]

EUG 3 MACT CC Group 2 Storage Vessels - Fixed Roof (FR)

These storage vessels are regulated under 40 CFR 63 Subpart CC (MACT CC) Group 2 Storage Vessels and are limited to the existing equipment as it is. Due to the overlap provisions of MACT CC §63.640(n), this list includes any Group 2 storage vessels that are also regulated under NSPS K or Ka but are not required to meet any control standards, as they must meet these requirements per §640(n)(7). Storage vessels required to meet control requirements under NSPS K and Ka are required to comply only with those subparts (§640(n)(6)) and are not included in this list.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
9 ¹	6242	2005	48'	150'	151,100
10	6180	1910	30'	96'	37,500
11	6181	1910	30'	96'	37,500
15	6244	1949	48'	140'	130,000
16	6245	2003	48'	150'	151,100
17	6183	1910	30'	96'	37,500
34	6252	1922	30'	53'	11,700
36	6253	1922	30'	53'	11,500
40	6185	1923	40'	32'	6,100
41	6248	1922	35'	29'	3,900
63	41639	1973	18'	20'	1,000
102	6189	1907	30'	96'	37,500
103	6190	1907	30'	96'	37,500
104	6255	2012	30'	96'	37,500
108	6191	1907	30'	96'	37,500
109	6192	1907	30'	96'	37,500
110	6193	1907	30'	96'	37,500
111	6194	1907	30'	96'	37,500
115a ²	38828	2007	48'	150'	150,000
215 ²	38842	2007	48'	150'	150,000
116	6199	1907	30'	96'	37,500
117	6200	1907	35'	115'	63,500
122	6203	2013	30'	96'	37,500
123	6260	1907	30'	96'	37,500
125	6262	1907	30'	96'	37,500
129	6204	1949	36'	35'	6,100
130	6205	1949	36'	35'	6,100
131	6265	1907	30'	96'	37,500
451	6229	1930	30'	53'	11,700
452A	6230	2015	32'	53'	11,500
603	23132	1951	30'	20'	1,617

¹ Replaces Tank 113 constructed 1907, per 98-021-TV (M-51).

2 Replaces Tank 115 constructed 1907, per 98-021-C (M-49).

- a. Fixed roof tanks in EUG 3 are subject to only the recordkeeping requirements of MACT Subpart CC for Group 2 storage vessels, as follow. [40 CFR 63.654(i)(1)(iv)]
 - 1. Readily accessible records showing the dimensions of each vessel and an analysis of the capacity of each vessel shall be maintained for the life of the vessel. [40 CFR 63.123(a)]
 - 2. Data, assumptions, and procedures used in determining Group 2 status for these tanks shall be documented. [40 CFR 63.646(b)(1)]

EUG 3A MACT CC Group 2 Storage Vessels - Fixed Roof (FR)

These storage vessels are regulated under 40 CFR 60 Subpart UU and 40 CFR 63 Subpart CC (MACT CC) Group 2 Storage Vessels and are limited to the existing equipment as it is. Due to the overlap provisions of MACT CC §63.640(n), this list includes any Group 2 storage vessels that are also regulated under NSPS K or Ka but are not required to meet any control standards, as they must meet these requirements per §640(n)(7). Storage vessels required to meet control requirements under NSPS K and Ka are required to comply only with those subparts (§640(n)(6)) and are not included in this list.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
107A	6257	2012	40'	100'	55,000
124A	6261	1907	30'	96'	37,500

- a. Fixed roof tanks in EUG 3A are subject to only the recordkeeping requirements of MACT Subpart CC for Group 2 storage vessels, as follow. [40 CFR 63.654(i)(1)(iv)]
 - 1. Readily accessible records showing the dimensions of each vessel and an analysis of the capacity of each vessel shall be maintained for the life of the vessel. [40 CFR 63.123(a)]
 - 2. Data, assumptions, and procedures used in determining Group 2 status for these tanks shall be documented. [40 CFR 63.646(b)(1)]

- b. The tanks in EUG 3A are subject to 40 CFR Part 60, Subpart UU (Asphalt Processing and Asphalt Roofing Manufacture) and shall comply with all applicable standards:
 - 1. 60.470: Applicability and designation of affected facilities
 - 2. 60.471: Definitions
 - 3. 60.472: Standards for particulate matter
 - 4. 60.473: Monitoring of operations
 - 5. 60.474: Test methods and procedures

EUG 5 NSPS Subpart Kb Storage Vessels - Internal Floating Roof (IFR)

These storage vessels are regulated under 40 CFR 60, NSPS Subpart Kb and are limited to the existing equipment as it is. Due to the overlap provisions of MACT CC, these vessels are required to comply only with NSPS Subpart Kb.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity, bbl.
4	23129	2003	48'	134'	120,600
6A	6177	2013	40'	114'	54,000
7	6178	2011	40'	114'	73,000
31	6250	1998	48'	48'	15,000
472	6240	2007	48'	150'	140,000
605	6278	1987	32'	30'	3,400
450A	6228	2011	32'	53'	12,000
445A	6223	2012	48	70	30,000
470A	6238	2013	40'	119'	80,000
473A	6241	2013	40'	119'	80,000

- a. IFR Tanks in EUG 5 are subject to NSPS Subpart Kb. The “overlap” provisions of MACT CC [§63.640(n)(1)] state that these storage vessels are required only to comply with the provisions of Kb.
 - 1. Mechanical design and operating specifications. [40 CFR 60.112b(a)(1)]
 - 2. Compliance testing and procedures. [40 CFR 60.113b(a)]
 - 3. Monitoring provisions [40 CFR 60.116b]

- b. Tanks in this EUG may be used in MACT CC Group 1 wastewater service, as they comply with the Alternative Standards for Storage Tanks of 40 CFR 61.351 and 40 CFR 60 Subpart Kb.

- c. Recordkeeping requirements include inspection results, dimensions and capacity of the storage vessels, VOL stored, period of storage, and maximum TVP. [40 CFR 60.115b and 116b]

- d. Reporting requirements include semi-annual reporting of deviations during inspections, notifications, and initial certifications. [40 CFR 60.115b]

EUG 7 MACT CC Group 2 Storage Vessels External Floating Roof (EFR) Tank

This storage vessel is regulated under 40 CFR 63, Subpart CC (MACT CC) Group 2 Storage Vessels and is limited to the existing equipment as it is.

Tank No.	Point ID	Year Built	Height	Diameter	Nominal Capacity
114	6197	1949	48'	140'	131,000

- a. This tank is subject to only the recordkeeping requirements of MACT Subpart CC for Group 2 storage vessels, as follow. [40 CFR 63.654(i)(1)(iv)]
1. Readily accessible records showing the dimensions of each vessel and an analysis of the capacity of each vessel shall be maintained for the life of the vessel. [40 CFR 63.123(a)]
 2. Data, assumptions, and procedures used in determining Group 2 status for each tank shall be documented. [40 CFR 63.646(b)(1)]

EUG 14 Low Vapor Pressure Loading Operations

There are several loading racks that handle materials that are not treated as VOCs under OAC Subchapters 37 and 39. All of these racks were constructed in 1949. These units are “grandfathered” (constructed prior to any applicable rule). There are no emission limits or compliance obligations applied to this EUG under Title V but it is limited to the existing equipment as it is.

Rack	Point ID	Material	Capacity
Black Oil Railcar	6169	Asphalt, flux, vacuum tower bottoms	12 cars
Black Oil Truck	6170	Asphalt, flux, vacuum tower bottoms	3 trucks
Diesel Railcar	14488	#2 diesel	8 cars
Gas oil Truck	6181	Gas oils	2 trucks

EUG 15 High Vapor Pressure Loading Operations

Rack	Point ID	Material	Capacity	Date
Terminal	6275	Gasoline and diesel	4 trucks	1951
Terminal	6275	Propane	1 truck	1951

*Reactivation date

- a. The gasoline loading rack is subject to 40 CFR 63 Subpart CC and shall comply with the following sections of 40 CFR 63 Subpart R and 40 CFR 60 Subpart XX, as referenced.
1. Loading rack standards and operating specifications per 40 CFR 60.502. [40 CFR 63.422(a, b, and c)]
 2. Test methods and procedures. This section of the subpart covers initial and subsequent performance tests of the vapor system, leak detection methods, and annual certification testing for tank trucks. [40 CFR 63.425(a, b, c, e, f, g, and h)]

- b. A continuous parameter monitoring system (CPMS) capable of measuring temperature is in the ductwork immediately downstream from the combustion zone in a position before any substantial heat exchange occurs. The system will shut down in the absence of a flame.
[40 CFR 63.427(a)(3) and (b), 40 CFR 60.503]
- c. Throughput of the product loading terminal shall not exceed 229,950,000 gallons per year diesel, 593,271,000 gallons per year gasolines, or 65,919,000 gallons per year ethanol, 12-month rolling totals.
- d. The gasoline loading rack is subject to certain state standards that are met through compliance with MACT Subpart CC (item (a) above). [OAC 252:100-39-41(c)]
- e. Firebox temperature and assist gas shall be monitored to demonstrate proper operation. Loading operations will be considered to be in compliance with Subpart CC / Subpart R if the VCU is signaling the assist gas valve to open when the temperature is below 500°F.
- f. Recordkeeping requirements:
1. Records will be maintained per 40 CFR 63.428(b), (c), (g)(1), and (h)(1), (2), and (3), as referenced in MACT CC. [40 CFR 63.654(b)]
 2. Throughput and emission records shall be maintained for the propylene racks to demonstrate their continued status as Insignificant Activity. [OAC 252:100-43]
 3. Throughput and emission records shall be maintained for the product loading terminal diesel, gasolines, and ethanol loading. [OAC 252:100-43]
 4. Firebox operating temperatures and assist gas valve position (continuously when loading gasoline).
- g. Reporting Requirements will be maintained per 40 CFR 63.428(b), (c), (g)(1), and (h)(1), (2), and (3), as referenced in MACT CC. [40 CFR 63.654(b)]

EUG 16 Existing Fugitive Emissions

Equipment leaks from the entire HEP facility, including but not limited to the storage tanks and the terminal are included in this Group. There are no emission limits applied to this EUG under Title V but it is limited to the existing equipment as it is. Because all equipment leaks are subject to the LDAR requirements of OAC 252:100-39-15 and some are also subject to LDAR requirements of MACT CC, the permittee will comply by meeting the following conditions.

- a. All affected equipment, in HAP service (containing > 5% by weight HAP), shall comply with NESHAP, 40 CFR 63, Subpart CC. The permittee shall comply with the applicable sections for each affected component. [40 CFR 63, Subpart CC]
1. § 63.642 General Standards – (c), (d)(1), (e), & (f);
 2. § 63.648 Equipment Leak Standards – (a), (b), (c), & (e-i);
 3. § 63.654 Reporting and Recordkeeping Requirements – (d), & (f-h).

- b. Certain equipment is regulated as described in OAC 252:100-39-15.
- c. Permittee shall maintain records identifying which components are regulated under each of the requirements listed in a, b, and c preceding.
- d. Recordkeeping provisions for these regulations are very extensive and are not summarized here. Records for components covered by the above requirements are found in the applicable rule. [40 CFR 63.654, 40 CFR 60.486, and OAC 252:100-39-15]
- e. Reporting provisions for these regulations are very extensive and are not summarized here. A single report may be submitted to comply with all of the reporting requirements above, so long as all reporting requirements for each regulation are included. [40 CFR 63.654, 40 CFR 60.487, and OAC 252:100-39-15]

EUG 31 Inline Gasoline Blender Fugitive Emissions

Equipment leak emissions from components in the proposed new inline gasoline blender.

Component	Estimated Counts
Gas/Vapor Valves	200
Light Liquid Valves	400
Light Liquid Pumps	6
Flanges / Connectors	1,222
Pressure Relief Devices	5
Process Drains	1

- a. The above process unit is subject to NSPS Subpart GGGa and shall comply with all applicable requirements for leak detection and repair. [40 CFR 60.592(a)]
- b. The owner operator shall comply with the requirements of §§ 60.482-1a through § 60.482-11a except as provided in § 60.593a:
 - 1. The operator shall demonstrate compliance with §§ 60.482-1a to 60.482-10a 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 § 60.485a unless the equipment is in vacuum service and is identified as required by § 60.486a(e)(5). [§ 60.482-1a(a), (b), & (d)]
 - 2. The owner or operator shall comply with the monitoring, inspection, and repair requirements, for pumps in light liquid service, of §§ 60.482-2a(a), (b), and (c) except as provided in §§ 60.482-2a(d), (e), and (f).
 - 3. Compressors in hydrogen service are exempt from the requirements of § 60.592a if an owner or operator demonstrates that a compressor is in hydrogen service. [§ 60.593a(b)(1)]
 - 4. The owner or operator shall comply with the operation and monitoring requirements, for pressure relief devices in gas/vapor service, of §§ 60.482-4a(a) and (b) except as provided in § 60.482-4a(c) and (d).
 - 5. The owner or operator shall comply with the applicable standards of § 60.482-5a for sampling connection systems.

6. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. 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. [§ 60.482-6a]
 7. The owner operator shall comply with the monitoring, inspection, and repair requirements, for valves in gas/vapor service and light liquid service, of §§ 60.482-7a(b) through (e), except as provided in 60.482-7a(f), (g), and (h), §§ 60.483-1a, 60.483-2a, and 60.482-1a(c). [§ 60.482-7a(a)]
 8. The owner operator shall comply with the monitoring and repair requirements, or pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors, of §§ 60.482-8a(a) through (d). [§ 60.482-8a]
 9. Delay of repair of equipment is allowed if it meets one of the requirements of §§60.482-9a(a) through (e).
 10. The owner or operator using a closed vent system and control device to comply with these provisions shall comply with the design, operation, monitoring and other requirements of 60.482-10a(b) through (m). [§ 60.482-10a(a)]
 11. The owner or operator shall comply with the applicable standards of § 60.482-11a for connectors in gas/vapor service and in light liquid service.
 12. An owner or operator may elect to comply with the alternative requirements for valves of §§ 60.483-1a and 60.483-2a. [§ 60.592a(b) & § 60.482-1a(b)]
 13. Each owner or operator subject to the provisions of NSPS Subpart GGGa shall comply with the test method and procedures of § 60.485a except as provided in §§ 60.593a. [§ 60.592a(d)]
 14. Each owner or operator subject to the provisions of NSPS Subpart GGGa shall comply with the recordkeeping requirements of § 60.486a and the reporting requirements of § 60.487a. [§ 60.592a(e)]
- c. The “overlap” provisions of MACT CC [§63.640(p)(2)] state that this unit is required only to comply with the provisions of NSPS Subpart GGGa.

EUG 33 New Propane Loading Unit Fugitive Emissions

Equipment leak emissions from components in the proposed new propane loading unit.

Component	Estimated Counts
Gas/Vapor Valves	32
Light Liquid Valves	16
Light Liquid Pumps	2
Flanges / Connectors	108
Pressure Relief Devices	4

- a. The permittee shall comply with the petroleum refinery leak detection and repair standards of OAC 252:100-39-15 for the new propane loading unit.

Insignificant Activities

Various records shall be maintained to demonstrate the continued status of certain emission sources as Insignificant Activities, as follow. [OAC 252:100-43]

Total emissions from any source classified as Insignificant on the basis of its emissions (annual), as well as a description of the calculation method used and data used in the calculation.

SPECIFIC CONDITION 3

No later than 30 days after each anniversary date of the issuance of the initial Title V permit, the permittee shall submit to Air Quality Division of DEQ, with a copy to the US EPA, Region 6, certification of compliance with the terms and conditions of this permit.

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

- a. Following submittal of an Annual Compliance Certification January 1 of each year may be used as the anniversary date for Annual Compliance Certifications.
- b. Following submittal of a Semi-Annual Monitoring Report, January 1 and June 30 of each year may be used as the due dates for Semi-Annual Monitoring Reports.

SPECIFIC CONDITION 4

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

OAC 252:100-7	Minor Sources	not in source category
OAC 252:100-11	Alternative Emissions Reduction	not requested
OAC 252:100-15	Mobile Sources	not in source category
OAC 252:100-17	Incinerators	not type of emission unit
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Grain Elevators	not in source category
OAC 252:100-47	Municipal Solid Waste Landfills	not in source category

SPECIFIC CONDITION 5

New VOL storage vessels may be added as part of the construction project such that added VOC emissions do not exceed 22.1 TPY. Roof landing losses should be included in tank VOC emissions as part of the 22.1 TPY total. The new tanks shall comply with NSPS Subpart Kb or MACT Subpart CC, as applicable. Applicability shall be determined on the operating permit application.

SPECIFIC CONDITION 6

The permittee shall apply for a modified operating permit within 180 days of start-up of any new unit authorized under this construction permit.

**MAJOR SOURCE AIR QUALITY PERMIT
STANDARD CONDITIONS
(July 21, 2009)**

SECTION I. DUTY TO COMPLY

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

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

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

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

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

SECTION II. REPORTING OF DEVIATIONS FROM PERMIT TERMS

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

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

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

SECTION III. MONITORING, TESTING, RECORDKEEPING & REPORTING

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

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

B. Records of required monitoring shall include:

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

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

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

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

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

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

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

[OAC 252:100-43]

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

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

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

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

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

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

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

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

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

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

SECTION IV. COMPLIANCE CERTIFICATIONS

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

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

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

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

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

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

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

SECTION V. REQUIREMENTS THAT BECOME APPLICABLE DURING THE PERMIT TERM

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

SECTION VI. PERMIT SHIELD

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

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

SECTION VII. ANNUAL EMISSIONS INVENTORY & FEE PAYMENT

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

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

SECTION VIII. TERM OF PERMIT

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

SECTION IX. SEVERABILITY

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

SECTION X. PROPERTY RIGHTS

- A. This permit does not convey any property rights of any sort, or any exclusive privilege. [OAC 252:100-8-6(a)(7)(D)]
- B. This permit shall not be considered in any manner affecting the title of the premises upon which the equipment is located and does not release the permittee from any liability for damage to persons or property caused by or resulting from the maintenance or operation of the equipment for which the permit is issued. [OAC 252:100-8-6(c)(6)]

SECTION XI. DUTY TO PROVIDE INFORMATION

- A. The permittee shall furnish to the DEQ, upon receipt of a written request and within sixty (60) days of the request unless the DEQ specifies another time period, any information that the DEQ may request to determine whether cause exists for modifying, reopening, revoking, reissuing, terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit. [OAC 252:100-8-6(a)(7)(E)]
- B. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 27A O.S. § 2-5-105(18). Confidential information shall be clearly labeled as such and shall be separable from the main body of the document such as in an attachment. [OAC 252:100-8-6(a)(7)(E)]

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

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

SECTION XII. REOPENING, MODIFICATION & REVOCATION

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

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

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

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

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

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

[OAC 100-8-7.3(d)]

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

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

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

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

SECTION XIII. INSPECTION & ENTRY

A. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized regulatory officials to perform the following (subject to the permittee's right to seek confidential treatment pursuant to 27A O.S. Supp. 1998, § 2-5-105(18) 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]

Andrew Haar, Environmental Manager
Holly Energy Partners
1700 S. Union Avenue
Tulsa, OK 74107

Re: Part 70 Permit No. **2012-924-C (M-3)(PSD)**
Tulsa Refinery Tank Farm and Product Loading

Dear Mr. Haar:

Enclosed is the modified Title V permit authorizing operation of the referenced facility. Please note that this permit is issued subject to certain standard and specific conditions that are attached.

Also note that you are required to annually submit an emission inventory for this facility. An emission inventory must be completed on approved AQD forms and submitted (hardcopy or electronically) by April 1st of every year. Any questions concerning the form or submittal process should be referred to the Emission Inventory Staff at 405-702-4100.

Thank you for your cooperation in this matter. If we may be of further service, please contact our office at (918) 293-1600. Air Quality personnel are located in the DEQ Regional Office at Tulsa, 3105 E. Skelly Drive, Suite 200, Tulsa, OK, 74105.

Sincerely,

David S. Schutz, P.E.
New Source Permits Section
Air Quality Division



PART 70 PERMIT

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

Permit No. 2012-924-C (M-3)(PSD)

Holly Refining & Marketing – Tulsa, LLC,

having complied with the requirements of the law, is hereby granted permission to modify a gasoline loading and refined products storage operation within the boundaries of the Tulsa Refinery, 902 W. 25th Street, Tulsa, Tulsa County, Oklahoma, subject to standard conditions dated July 21, 2009, and specific conditions, both attached.

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

Division Director

Air Quality Division

Date