Permit Number 5631

This Table Lists the Maximum Allowable Emission Rates and All Sources of Air Contaminants on the Applicant's property Covered by this Permit. The Emission Rates Shown Are Those Derived from Information Submitted as Part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in Emission Rates May Require an Application for a Modification of the Facilities Covered by this Permit. **(03/06)**

Emission	Source	Air Contaminant <u>Emission</u>		n Rates *	
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY	
	• •				
27-14	Internal Floating Roof Tank	VOC			
27-15	Internal Floating Roof Tank	VOC			
80-7	Internal Floating Roof Tank	VOC			
80-10	Internal Floating Roof Tank	VOC			
80-12	Internal Floating Roof Tank	VOC			
80-43	Internal Floating Roof Tank	VOC			
80-44	Internal Floating Roof Tank	VOC			
80-45	Internal Floating Roof Tank	VOC			
80-46	Internal Floating Roof Tank	VOC			
100-47	Internal Floating Roof Tank	VOC			
100-48	Internal Floating Roof Tank	VOC			
100-49	Internal Floating Roof Tank	VOC			
100-54	Internal Floating Roof Tank	VOC			
100-55	Internal Floating Roof Tank	VOC			
100-56	Internal Floating Roof Tank	VOC			
100-58	Internal Floating Roof Tank	VOC			
100-59	Internal Floating Roof Tank	VOC			
150-9	Internal Floating Roof Tank	VOC			
150-40	Internal Floating Roof Tank	VOC			
150-41	Internal Floating Roof Tank	VOC			
150-42	Internal Floating Roof Tank	VOC			
200-8	Internal Floating Roof Tank	VOC			
200-11	Internal Floating Roof Tank	VOC			
200-51	Internal Floating Roof Tank	VOC			
200-53	Internal Floating Roof Tank	VOC			
250-50	Internal Floating Roof Tank	VOC			
250-52	Internal Floating Roof Tank	VOC			
260-5	Internal Floating Roof Tank	VOC			
260-6	Internal Floating Roof Tank	VOC			
300-1	Internal Floating Roof Tank	VOC			
300-2	Internal Floating Roof Tank	VOC			

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * Ib/hr TPY
Point No. (1) 300-3 300-4 300-21 300-22 C80-4 LD-111 LD-112 LD-113 LD-114 TH-501 TH-502 C30-10 C80-1 C80-2 C80-3 C30-13 LD-115 LD-116	Internal Floating Roof Tank Fixed-Roof Tank	Name (3) VOC VOC VOC VOC VOC VOC VOC VOC VOC VO	
FUG 100 FUG 300 FUG 500 FUG C FUG D SD-1 BD-B TR-1 MLF-1 MLF-2 E-1 E-2 H-1 OWS-1	100 Manifold Fugitives (4) 300 Manifold Fugitives (4) 500 Manifold Fugitives (4) C Manifold Fugitives (4) D Manifold Fugitives (4) Ship Dock 1 Fugitives (4) Barge Dock B Fugitives (4) Truck Loading Rack 1 Marine Loading Flare 1 Marine Loading Flare 2 Engine Engine Heater Oil/Water Separator 1	•	n assist loading) n assist loading)

VOC Emission Caps

Emission	mission Source		Emission Rates *		
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY	
	• •				
Overall			507.61 (6)	257.28 (8)	
	ıp, and Shutdown Emissions ((22M)	307.01 (0)	(7)	
Maintenance, Starte		(1)			
	137.00 (9)				
27-14	Internal Floating Roof Tank	BZ			
27-15	Internal Floating Roof Tank	BZ			
80-7	Internal Floating Roof Tank	BZ			
80-10	Internal Floating Roof Tank	BZ			
80-12	Internal Floating Roof Tank	BZ			
80-43	Internal Floating Roof Tank	BZ			
80-44	Internal Floating Roof Tank	BZ			
80-45	Internal Floating Roof Tank	BZ			
80-46	Internal Floating Roof Tank	BZ			
100-47	Internal Floating Roof Tank	BZ			
100-48	Internal Floating Roof Tank	BZ			
100-49	Internal Floating Roof Tank	BZ			
100-54	Internal Floating Roof Tank	BZ			
100-55	Internal Floating Roof Tank	BZ			
100-56	Internal Floating Roof Tank	BZ			
100-58	Internal Floating Roof Tank	BZ			
100-59	Internal Floating Roof Tank	BZ			
150-9	Internal Floating Roof Tank	BZ			
150-40	Internal Floating Roof Tank	BZ			
150-41	Internal Floating Roof Tank	BZ			
150-42	Internal Floating Roof Tank	BZ			
200-8	Internal Floating Roof Tank	BZ			
200-11	Internal Floating Roof Tank	BZ			
200-51	Internal Floating Roof Tank	BZ			
200-53	Internal Floating Roof Tank	BZ			
250-50	Internal Floating Roof Tank	BZ			
250-52	Internal Floating Roof Tank	BZ			
260-5	Internal Floating Roof Tank	BZ			
260-6	Internal Floating Roof Tank	BZ			
300-1	Internal Floating Roof Tank	BZ			
300-2	Internal Floating Roof Tank	BZ			
300-3	Internal Floating Roof Tank	BZ			
300-4	Internal Floating Roof Tank	BZ			

AIR CONTAMINANTS DATA

Emission	Source	Air Contaminant	Emission F	Rates *
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY
300-21	Internal Floating Roof Tank	BZ		
300-22	Internal Floating Roof Tank	BZ		
C80-4	Internal Floating Roof Tank	BZ		
LD-111	Internal Floating Roof Tank	BZ		
LD-112	Internal Floating Roof Tank	BZ		
LD-113	Internal Floating Roof Tank	BZ		
LD-114	Internal Floating Roof Tank	BZ		
TH-501	Internal Floating Roof Tank	BZ		
TH-502	Internal Floating Roof Tank	BZ		
C30-10	Fixed-Roof Tank	BZ		
C80-1	Fixed-Roof Tank	BZ		
C80-2	Fixed-Roof Tank	BZ		
C80-3	Fixed-Roof Tank	BZ		
C30-13	Fixed-Roof Tank	BZ		
LD-115	Fixed-Roof Tank	BZ		
LD-116	Fixed-Roof Tank	BZ		
FUG 100	100 Manifold Fugitives (4)	BZ		
FUG 300	300 Manifold Fugitives (4)	BZ		
FUG 500	500 Manifold Fugitives (4)	BZ		
FUG C	C Manifold Fugitives (4)	BZ		
FUG D	D Manifold Fugitives (4)	BZ		
SD-1	Ship Dock 1 Fugitives (4)	BZ		
BD-B	Barge Dock B Fugitives (4)	BZ		
TR-1	Truck Loading Rack 1	BZ		
MLF-1	Marine Loading Flare 1	BZ		
MLF-2	Marine Loading Flare 2	BZ		
Benzene Emissi	on Caps			
Overell		D7	40 22 (10)	10 20 (10)
Overall	artup, and Shutdown Emissions (BZ (MSS)	49.33 (10) BZ	10.39 (12) 59.82 (11)
maniteriance, St	6.91 (13)	(1V133)	DL	39.02 (11)
		NO 65		
MLF-1	Marine Loading Flare 1	NO _x , CO		
MLF-2	Marine Loading Flare 2	NO _x , CO		

NO_x, CO

NO_x, CO

Engine

Engine

E-1

E-2

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emissior lb/hr	Rates * TPY		
H-1	Heater	NO _x , CO				
	Emission Cap	NO _x	23.23	72.49		
	Emission Cap	СО	24.85	45.88		
E-1 E-2 H-1	Engine Engine Heater	PM, SO ₂ PM, SO ₂ PM, SO ₂				
	Emission Cap Emission Cap	PM SO ₂	0.36 0.04	1.58 0.19		
PORTFLARE	PORTFLARE Portable Flares		11.60 23.16 86.98 29.30	4.99 9.96 (9) (13)		
Boilers and Turbine	<u>s</u>					
S-2	Boiler S-2 [(14) Source: PBR Reg. 71166]	VOC NO _x CO PM SO ₂	0.11 0.16 0.35 0.03 0.06	0.11 0.16 0.35 0.03 0.06		
Individual Marine Loading Docks						
SD-6, SD-7	Ship Dock 6, Ship Dock 7 [(14) Source: PBR Reg. 48635]	VOC	0.08	0.03		
SD-8	Ship Dock 8 [(14) Source: PBR Reg. 41029]	VOC 	4.55	4.85		

Emission Source		Air Contaminant	Emission Rates *		
Point No. (1)	Name (2)	Name (3)	ID/III	IPT	
<u>Individual Railcar Le</u>	oading Operations				
RCR-1	Railcar Rack 1 [(14) Source: PBR Reg. 44160 X (Project No. 66375), and Documented (Non-registered) PBR]	VOC	1.01	4.41	
Individual Tank True	ck Loading Operations				
TR-2	Truck Rack 2 [(14) Source: PBR Reg. 52653	VOC]	0.08	0.37	
Individual Fugitive A	<u>Areas</u>				
FUG 100	100 Manifold Fugitives (4) (5) [(14) Source: PBR Reg. 73860 also includes Former EPN METER-CRUDE: Crude Oil Me Station 1 Fugitives (4), (14) Sources: PBR Reg. 73860 and 77421]	,	0.43	1.86	
FUG 200	200 Manifold Fugitives (4) [(14) Sources: PBR Reg. 5128 51383, 77421, 78592, and 81089]	VOC 7, BZ	0.80 0.08	3.41 0.28	
FUG 300	300 Manifold Fugitives (4) (5) [(14) Sources: PBR Reg. 4762 and 77421]	VOC 9 BZ	0.04 0.01	0.13 0.01	
FUG 400	400 Manifold Fugitives (4) [(14) Sources: PBR Reg. 5004	VOC 8, BZ	0.99 0.07	4.31 0.26	
FUG 600	55908, 76993, and 77421] 600 Manifold Fugitives (4)	VOC	0.04	0.18	

Emission Source		Air Contaminant	Emission Rates *		
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY	
	(Source: Permit 51545)	BZ	0.04	0.18	
KILGORE	Kilgore Equipment Fugitive Area (4) [(14) Source: PBR Reg. 77421]	VOC BZ	0.02 0.01	0.06 0.01	
PR FUG	PR FUG Equipment Fugitive Area (4) [(14) Source: PBR Reg. 77421]	VOC BZ	0.15 0.02	0.62 0.06	
FUG SD-1	Ship Dock 1 Fugitive Area (4) [(14) Source: PBR Reg. 77076]	VOC BZ	0.11 0.01	0.47 0.05	
FUG SD-4/5	Ship Dock 4/5 Fugitive Area (4) [(14) Source: PBR Reg. 77076]	VOC BZ	0.11 0.01	0.47 0.05	
FUG SD-6/7 (Formerly FUG G)	Ship Dock 6/7 Fugitive Area (4) [(14) Source: PBR Reg. 48635 and 77421]	VOC BZ	0.11 0.01	0.44 0.03	
FUG SD-8 (Formerly FUG F)	Ship Dock 8 Fugitive Area (4) [(14) Source: PBR Reg. 41029 and 77421]	VOC BZ	0.11 0.01	0.44 0.04	
FUG BD-B	Barge Dock B Fugitive Area (4) [(14) Source: PBR Reg. 77076]	VOC BZ	0.11 0.01	0.47 0.05	
FUG BD-D	Barge Dock D Fugitive Area (4) [(14) Source: PBR Reg. 77076]	VOC BZ	0.11 0.01	0.47 0.05	
FUG RCR-1	Railcar Rack equipment Fugitives (4) [(14) Sources: PBR Reg. 44160, X (Project No. 66375), Document (Non-registered) PBR, and 774		0.07	0.26	
FUG TR - 1/2	Truck Rack equipment Fugitives (4) [(14) Sources:	VOC BZ	0.06 0.02	0.21 0.02	

Emission			Emission Rates *		
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY	
Individual Oil/Water	PBR Reg. 52653,77076, and 77421] Separators				
OWS-2	Oil/Water Separator 2 [(14) Source: PBR Reg. 55701]	VOC	5.00	1.90	
<u>Individual Tanks</u>					
80-62	Internal Floating Roof Tank	VOC	8.29	2.11	
	[(14), Source: PBR Reg. 76993] BZ	0.42	0.09	
80-64	Internal Floating Roof Tank	VOC	8.29	2.11	
	[(14), Source: PBR Reg. 76993] BZ	0.42	0.09	
100-57	Internal Floating Roof Tank	VOC	7.55	3.64	
	(Source: Permit 51545)	BZ	1.78	1.71	
100-60	Internal Floating Roof Tank	VOC	7.65	3.01	
	[(14), Source: PBR Reg. 76993] BZ	0.38	0.13	
100-61	Internal Floating Roof Tank	VOC	7.65	3.01	
	[(14), Source: PBR Reg. 76993] BZ	0.38	0.13	
100-63	Internal Floating Roof Tank	VOC	7.65	3.01	
	[(14), Source: PBR Reg. 76993] BZ	0.38	0.13	
175-59	Internal Floating Roof Tank	VOC	6.09	2.26	
	[(14), Source: PBR Reg. 55908] BZ	0.31	0.09	
200-20	Internal Floating Roof Tank	VOC	5.66	4.37	
	[(14), Source: PBR Reg. 78592]] BZ	0.28	0.19	
200-56	Internal Floating Roof Tank (5) [(14), Source: PBR Reg. 50048	VOC]	2.01	2.67	
200-57	Internal Floating Roof Tank (5) [(14), Source: PBR Reg. 50048]	VOC]	2.01	2.67	

Emission			Emission Rates *		
Point No. (1)	Name (2)	Name (3)	lb/hr	TPY	
200-58	Internal Floating Roof Tank (5) [(14), Source: PBR Reg. 50048	VOC []	2.01	2.67	
300-25	Internal Floating Roof Tank	VOC	5.16	11.53	
	(Source: Permit 51545)	BZ	0.55	0.81	
390-23	Internal Floating Roof Tank (5) [(14), Source: PBR Reg. 51287	VOC]	4.31	3.91	
390-24	Internal Floating Roof Tank	VOC	4.31	3.91	
	(Source: Permit 51545)	BZ	0.29	0.65	
390-25	Internal Floating Roof Tank	VOC	4.74	6.00	
	[(14), Source: PBR Reg. 78592	r] BZ	0.23	0.26	
390-26	Internal Floating Roof Tank	VOC	4.74	6.00	
	[(14), Source: PBR Reg. 78592	r] BZ	0.23	0.26	
390-27	Internal Floating Roof Tank	VOC	4.74	6.00	
	[(14), Source: PBR Reg. 78592	P] BZ	0.23	0.26	
390-30	Internal Floating Roof Tank	VOC	4.74	4.70	
	[(14), Source: PBR Reg. 81089] BZ	0.23	0.13	
390-31	Internal Floating Roof Tank	VOC	4.74	4.70	
	[(14), Source: PBR Reg. 81089)] BZ	0.23	0.13	
390-32	Internal Floating Roof Tank	VOC	4.74	4.70	
	[(14), Source: PBR Reg. 81089)] BZ	0.23	0.13	
390-33	Internal Floating Roof Tank	VOC	4.74	4.70	
	[(14), Source: PBR Reg. 81089)] BZ	0.23	0.13	
390-34	Internal Floating Roof Tank	VOC	4.74	4.70	
	[(14), Source: PBR Reg. 81089] BZ	0.23	0.13	

- (1) Emission Point Identification specific equipment designation or emission point number from plot plan.
- (2) Specific Point Source Name use area name or fugitive source name for fugitive area sources
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 (30 TAC § 101.1)
 - BZ benzene
 - NO_x total oxides of nitrogen
 - CO carbon monoxide
 - PM particulate matter, suspended in the atmosphere, including PM₁₀
 - PM₁₀ particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
 - SO₂ sulfur dioxide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Emission rates were calculated based on the permit by rule requirements at the time of submittal to Texas Commission on Environmental Quality (TCEQ); i.e., only VOC emissions are quantified. Estimated rates of benzene emissions from these sources would be based on the 'Emissions of Crude Oil and Refinery Petroleum Fractions Containing Less Than 10 percent Benzene,' defined in Table 478 of 30 TAC § 106.478.

VOC Emission Caps:

- (6) Overall VOC Cap (lb/hr) Applicable only to the hourly VOC emissions from routine operations of the permitted sources for which no individual emission rate is specified by this permit. This emission rate limit includes the overall BZ lb/hr cap defined in (10) but does not authorize emissions of this constituent greater than its specified cap.
- (7) The maintenance, startup, and shutdown (MSS) VOC Cap (lb/hr) Separate from the Overall VOC Cap (lb/hr), applicable only to the total VOC emissions from the standing idle, re-filling, and de-gassing periods of the roof landing operations conducted for any combination of IFR vessels authorized by this permit. The maximum value of the overall MSS VOC lb/hr cap is compound-specific, and determined by the equation in Special Condition No. 19 with use of 0.80 as the value of the specified factor (note: the value of the factor in Special Condition No. 19, i.e., 0.75, applicable only to re-fill emissions). The MSS VOC (lb/hr) limit includes the MSS BZ lb/hr cap defined in (11) but does not authorize emissions of this constituent greater than its specified cap.
- (8) Overall VOC Cap (TPY) Applicable only to the annual VOC emissions from (a) the routine operations of the permitted sources for which no individual emission rate is specified by this permit, and (b) the MSS operations covered by the emissions authorizations in the MSS VOC Cap (TPY) (i.e., the MSS VOC Subcap is a component of the overall VOC Cap, but is applicable only to the MSS operations, including those associated with tank roof landings, of the permitted sources). The Overall VOC (TPY) limit includes the Overall BZ TPY cap defined in (12) but does not authorize emissions of this constituent greater than its specified cap.

(9) The MSS VOC Cap (TPY) - A subcap within the Overall VOC Cap (TPY), applicable only to the annual VOC emissions from (a) the standing idle, re-filling and de-gassing periods of the roof landing operations conducted for any combination of IFR vessels authorized by this permit, and (b) the flares used to control these emissions. The MSS VOC (TPY) limit includes the MSS BZ TPY cap defined in (13) but does not authorize emissions of this constituent greater than its specified cap.

Benzene Emission Caps:

- (10) Overall BZ Cap (lb/hr) Applicable only to the hourly benzene emissions from the routine operations of the permitted sources for which no individual emission rate is specified by this permit.
- (11) The MSS BZ Cap (lb/hr) Separate from the Overall BZ Cap (lb/hr), applicable only to the total benzene emissions from the standing idle, re-filling, and de-gassing periods of the roof landing operations conducted for any combination of IFR vessels authorized by this permit. The maximum allowable emission rate value (59.82 lb/hr) of the MSS BZ lb/hr cap is based on this compound's worst-case emission scenario.
- (12) Overall BZ Cap (TPY) Applicable only to the annual benzene emissions from (a) the routine operations of the permitted sources for which no individual emission rate is specified by this permit, and (b) the MSS operations included in the MSS BZ Cap (TPY).
- (13) The MSS BZ Cap (TPY) A subcap within the Overall BZ Cap (TPY), applicable only to the annual benzene emissions from (a) the standing idle, re-filling and de-gassing periods of the roof landing operations conducted for any combination of IFR vessels authorized by this permit, and (b) the flares used to control these emissions.
- (14) This emission source has been consolidated by incorporation into Flexible Permit Number 5631 as prescribed in the TCEQ Interoffice Memorandum dated September 26, 2006.
- (15) As referenced in Special Condition No. 14, the following are existing, unmodified IFR storage tanks per this permit's MAERT dated February 10, 2009: 27-14, 27-15, 80-7, 80-10, 80-12, 80-43, 80-44, 80-45, 80-46, 100-47, 100-48, 100-49, 100-54, 100-55, 100-56, 100-58, 100-59, 150-9, 150-40, 150-41, 150-42, 200-8, 200-11, 200-51, 200-53, 250-50, 250-52, 260-5, 260-6, 300-1, 300-2, 300-3, 300-4, 300-21, 300-22, C80-4, LD-111, LD-112, LD-113, LD-114, TH-501, and TH-502 from the Overall VOC Emission Cap. Also included are Tanks 80-62, 80-64, 100-57, 100-60, 100-61, 100-63, 175-59, 200-20, 200-56, 200-57, 200-58, 300-25, 390-23, 390-24, 390-25, 390-26, 390-27, 390-30, 390-31, 390-32, 390-33, and 390-34 from the MAERT Section labeled "Individual Tanks". (12/09)

*	Emission rate	es are	based	on ar	d the	facilities	are	limited	by t	he	following	maximum	operating
	schedule:												

ŀ	Hrs/day	Days	/week	Weeks/year	or Hrs/yea	r 8,760

Date December 23, 2009