EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 46396 and PSDTX1073M1

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.

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
06VDU2CHTR	VDU-2 Heater	NO_x	2.97	11.71
		CO	6.89	13.64
		SO_2	2.37	4.39
		PM	0.74	2.91
		VOC	0.52	2.06
30CKRHTR1	CU - Heater 1	NO_x	2.11	7.18
		CO	14.68	25.10
		SO_2	5.06	8.07
		PM	1.57	5.35
		VOC	1.11	3.78
30CKRHTR2	CU - Heater 2	NO_x	2.11	7.18
		CO	14.68	25.10
		SO_2	5.06	8.07
		PM	1.57	5.35
		VOC	1.11	3.78
31KNHTHTR	KNHT Charge Heater	NO_x	1.26	1.38
		CO	2.92	1.61
		SO_2	1.01	0.52
		PM	0.31	0.34
		VOC	0.22	0.24
43DHT3CHTR	DHT-3 Charge Heater (17)	NO_x	1.50	5.91
		CO	3.48	6.89
		SO_2	1.20	2.22
		PM	0.37	1.47
		VOC	0.26	1.04

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2) TPY**	Air Contaminant Name (3)	Emission Rates * lb/hr	
25SRUINCIN	SRU4 Incinerator	NO_x	6.40	14.59
		CO	39.53	36.85
		SO_2	55.31	136.66
		PM	0.60	1.36
		VOC	0.43	0.98
		H_2S	0.03	0.07
36SRUINCIN	SRU 5 Incinerator	NO_x	6.40	14.59
		CO	39.53	36.85
		SO_2	55.31	136.66
		PM	0.60	1.36
		VOC	0.43	0.98
		H_2S	0.03	0.07
22TANK0441	Tank 441	VOC	31.88	4.27
22TANK0516	Tank 516	VOC	0.21	0.10
	Tank 516 (8)	VOC	7.60	1.82
22TANK0522	Tank 522 (7)	VOC	0.20	0.28
	Tank 522 (8)	VOC	0.48	(13)
22TANK0526	Tank 526	VOC	0.71	1.05
22TANK0537	Tank 537	VOC	0.28	0.45
	Tank 537 (8)	VOC	0.68	(13)
22TANK0545	Tank 545	VOC	0.83	0.40
	Tank 545 (7)	VOC	1.14	0.40
22TANK0586	Tank 586 (7)	VOC	0.09	0.63
	Tank 586 (8)	VOC	8.50	1.47

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
22TANK0587	Tank 587 (7)	VOC	50.62	4.97
22TANK0588	Tank 588	VOC	0.61	0.49
22TANK0591	Tank 591	VOC	0.64	0.41
22TANK0597	Tank 597	VOC	1.88	0.36
22TANK0598	Tank 598	VOC	1.88	0.36
22TANK0599	Tank 599	VOC	0.28	0.23
	Tank 599 (8)	VOC	1.06	0.23
22TANK0902	Tank 902 (7)	VOC	31.88	2.90
22TANK0906	Tank 906	VOC	0.98	2.21
22TANK0907	Tank 907	VOC	0.98	2.15
22TANK0919	Tank 919	VOC	0.33	0.92
22TANK0920	Tank 920	VOC	0.24	0.85
22TANK0938	Tank 938	VOC	1.37	3.79
22TANK0939	Tank 939	VOC	1.39	3.65
37TANK1002	Tank 1002	VOC	0.16	0.03
22TANK0948	Tank 948 (7)	VOC	0.83	0.57
	Tank 948 (8)	VOC	1.21	0.57
22TANK0452	Tank 452 (7)	VOC	10.80	(9)
22TANK0453	Tank 453 (7)	VOC	10.80	(9)

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
22TANK0454	Tank 454 (7)	VOC	10.80	(9)
22TANK0455	Tank 455 (7)	VOC	10.77	(9)
22TANK0475	Tank 475 (7)	VOC	13.19	(9)
22TANK0476	Tank 476 (7)	VOC	13.19	(9)
22TANK0477	Tank 477 (7)	VOC	11.36	(9)
22TANK0478	Tank 478 (7)	VOC	11.36	(9)
22TANK0479	Tank 479 (7)	VOC	11.36	(9)
22TANK0480	Tank 480 (7)	VOC	9.08	(9)
22TANK0481	Tank 481 (7)	VOC	9.09	(9)
22TANK0482	Tank 482 (7)	VOC	8.89	(9)
22CRUDECAP	Crude Cap	VOC	---	37.98
22TANK0532	Tank 532	VOC	4.30	(10)
22TANK0541	Tank 541	VOC	3.10	(10)
22TANK0542	Tank 542	VOC	3.17	(10)
22TANK0935	Tank 935	VOC	2.37	(10)
22GASCAP	Gasoline Cap	VOC	---	40.73
22TANK0525	Tank 525 (7)	VOC	0.85	(10)
	Tank 525 (8)	VOC	1.22	(10)

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
22TANK0543	Tank 543	VOC	0.66	(11)
22TANK0909	Tank 909	VOC	0.67	(11)
22TANK0940	Tank 940	VOC	0.71	(11)
22TANK0910	Tank 910	VOC	1.19	3.21
	Tank 910 (8)	VOC	0.66	(11)
22JETCAP	Jet Cap	VOC	---	0.38
	Jet Cap (8)	VOC	---	0.43
22TANK0524	Tank 524	VOC	11.29	(12)
22TANK0917	Tank 917	VOC	31.88	(12)
22TANK0918	Tank 918	VOC	31.88	(12)
22TANK0921	Tank 921 (7)	VOC	3.93	0.67
	Tank 921 (8)	VOC	0.63	1.39
22TANK0922	Tank 922 (7)	VOC	3.93	0.67
	Tank 922 (8)	VOC	0.63	1.39
22TANK934	Tank 934	VOC	11.29	(12)
22TANK0933	Tank 933	VOC	20.07	(12)
22DIESELCAP	Diesel Cap (15)	VOC	---	14.50
	Diesel Cap (15) (8)	VOC	---	15.23
22TANK0558	Tank 558 (7)	VOC	0.31	(13)

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
22TANK0559	Tank 559 (7)	VOC	0.60	(13)
	Tank 559 (8)	VOC	0.48	(13)
22TANK0560	Tank 560 (7)	VOC	0.31	(13)
22TANK0561	Tank 561 (7)	VOC	0.31	(13)
22GASOILCAP	Gas Oil Cap (7)	VOC	---	0.25
	Gas Oil Cap (8)	VOC	---	0.82
22TANK0589	Tank 589 (7)	VOC	0.57	(14)
22TANK0925	Tank 925 (7)	VOC	0.57	(14)
22TANK0506	Tank 506	VOC	0.89	2.66
67TANK0401C	Tank 401C	VOC	0.01	0.01
67TANK0500C	Tank 500C	VOC	4.26	0.31
38V107	SW Skimmed Oil (Tank 38V-107)	VOC	0.01	0.01
22CBOCAP	Carbon Black Oil Cap	VOC	---	0.16
30CKRTRKLD	Coke Handling	PM	0.21	0.86
30DCPCT1	DCP Cooling Tower	PM	0.32	1.42
		VOC	0.60	2.65
22OSFTKFUG	Piping Fugitives (4)	VOC	1.28	5.58
45DOCKTO1	Marine Terminal	VOC	5.82	(5)

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
	Thermal Oxidizer 1	NO_x	10.08	(5)
		CO	15.42	(5)
		SO_2	0.14	(5)
45DOCKTO2	Marine Terminal Thermal Oxidizer 2	VOC	11.63	(5)
		NO_x	19.51	(5)
		CO	29.84	(5)
		SO_2	0.16	(5)
45DOCKTOCAP	Marine Terminal Thermal Oxidizers 1 and 2 Cap	VOC		3.40
		NO_x		4.95
		CO		14.67
		SO_2		0.02
45DOCK1LDG	Dock 1 Loading Losses	VOC	29.69	6.56
45DOCK3LDG	Dock 3 Loading Losses	VOC	29.69	(6)
45DOCK1FUG	Dock 1 Equipment Fugitives (4)	VOC	1.57	6.87
45DOCK3FUG	Dock 3 Equipment Fugitives (4)	VOC	1.57	6.87
06VDU2FUGS	VDU-2 Fugitives (4)	VOC	1.73	7.56
		H_2S	0.03	0.14
30CKRFUGS	CU Fugitives (4)	VOC	6.60	28.90
		NH_3	0.01	0.01
		H_2S	0.21	0.90
43DHT3FUGS	DHT-3 Fugitives (4)	VOC	1.53	6.70
		H_2S	0.08	0.34
		NH_3	0.01	0.01
42FGTFUGS	ARU-2 Fugitives (4)	VOC	0.31	1.35
		H_2S	0.07	0.31
		NH_3	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
39SWS3FUGS	SWS-3 Fugitives (4)	VOC	0.02	0.08
		H_2S	0.06	0.26
		NH_3	0.02	0.09
47SWS4FUGS	SWS-4 Fugitives (4)	VOC	0.01	0.01
		NH_3	0.01	0.03
		H_2S	0.01	0.03
34SRU4FUGS	SRU 4/TGU 4 Fugitives (4)	VOC	0.21	0.91
		H_2S	0.13	0.57
		NH_3	0.02	0.08
35SRU5FUGS	SRU 5/TGU 5 Fugitives (4)	VOC	0.21	0.91
		NH_3	0.02	0.08
		H_2S	0.13	0.57
31KNHTFUGS	KNHT Fugitives (4)	VOC	1.05	4.61
		NH_3	0.01	0.01
		H_2S	0.05	0.22
19PSAFUGS	PSA Fugitives (4)	VOC	0.41	1.82
22TKDCPFUG	DCP Tank Fugitives (4)	VOC	0.05	0.20
22TK926FLR	Tank 926 Flare	VOC	0.01	0.01
		NO_x	0.38	1.66
		CO	0.69	2.74
50BZTNKFLR	Tanks 928, 929, and 930 Flare (7)(8)	VOC	0.06	0.04
		NO_x	0.58	5.22
		CO	0.56	7.32
30CKRFLARE	Coker Flare	NO_x	0.01	0.01

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2) TPY**	Air Contaminant Name (3)	Emission Rates * lb/hr	
		CO	0.01	0.04
		SO_2	0.01	0.05
		VOC	0.04	0.14
		H_2S	0.01	0.01
01ACU1FUGS	ACU-1 Fugitives (4)	VOC	5.58	24.45
		H_2S	0.01	0.02
		NH_3	0.01	0.01
02ACU2FUGS	ACU-2 Fugitives (4)	VOC	8.34	36.53
		H_2S	0.09	0.06
		NH_3	0.01	0.01
51DHT1FUGS	DHT-1 Fugitives (4)	VOC	3.35	14.68
		H_2S	0.05	0.21
		NH_3	0.01	0.01
52DHT2FUGS	DHT-2 Fugitives (4)	VOC	4.73	20.70
		H_2S	0.01	0.06
		NH_3	0.01	0.02
28LPGFUG	LPG Fugitives (4)	VOC	1.59	6.97
13UNIBFUGS	Unibon Fugitives (4)	VOC	5.86	25.67
		H_2S	0.33	1.46
		NH_3	0.01	0.01
30AMSTFUGS	NH_3 Storage Fugitives (4)	NH_3	0.02	0.11
MAINTENANCE, START-UP, AND SHUTDOWN (MSS)				
MSS_TA	Process Unit Turnarounds (16)	VOC	232.39	2.49
		CO	349.59	5.18
		NO_x	52.79	0.77
		SO_2	7899.81	47.95
		H_2S	136.50	0.79

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
MSS_ATM	Process Unit Turnarounds (16)	VOC	24.40	0.29
		H_2S	5.18	0.06
MSS_ILE	Process Equipment MSS to ATM	VOC	17.74	6.18
43DHT3CMSS	DHT-3 Heater MSS (17)	CO	3.50	---
30CKRH1MSS	DCU-1 Heater MSS	VOC	1.11	0.09
		NO_x	13.72	1.15
		CO	14.68	1.23
		PM	1.57	0.13
		SO_2	5.06	0.42
30CKRH2MSS	DCU-2 Heater MSS	VOC	1.11	0.09
		NO_x	13.72	1.15
		CO	14.68	1.23
		PM	1.57	0.13
		SO_2	5.06	0.42

(1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
(2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
CO - carbon monoxide
SO_2 - sulfur dioxide
PM - particulate matter, suspended in the atmosphere, including PM_{10}
PM_{10} - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.
H_2S - hydrogen sulfide
NH_3 - ammonia
(4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

the applicable special conditions and permit application representations.

(5) Annual emission rates shown with 45DOCKTO1/45DOCKTO2 CAPS are the summed emission caps for 45DOCKTO1 and 45DOCKTO2.

(6) Annual emission rates shown with 45DOCK1LDG are the summed emission cap for 45DOCK1LDG and 45DOCK3LDG.

(7) Emission rate listed is not in effect until the source is removed from any other active New Source Review (NSR) permits via permit alteration if necessary.

(8) Emission rate listed is not in effect until start-up of the DCP and the source is removed from any other active NSR permits via permit alteration if necessary.

(9) Annual VOC emission rate is included in the Crude Cap (Emission Point No. [EPN] 22CRUDECAP). Upon start-up of the Deep Conversion Project, the annual emission rate listed for Tank 482 (EPN 22TANK0482) may be removed as it is part of the overall Crude Cap.

(10) Annual VOC emission rate is included in the Gasoline Cap (EPN 22GASCAP).

(11) Annual VOC emission rate is included in the Jet Cap (EPN 22JETCAP).

(12) Annual VOC emission rate is included in the Diesel Cap (EPN 22DIESELCAP).

(13) Annual VOC emission rate is included in the Gas Oil Cap (EPN 22GASOILCAP).

(14) Annual VOC emission rate is included in the Carbon Black Oil Cap (EPN 22CRUDECAP).

(15) Annual VOC emissions from tanks included in the Diesel Cap (22DIESELCAP) may not exceed 14.50 tons per year (tpy) until Tank 921 (EPN 22TANK0921) and Tank 922 (EPN 22TANK0922) are removed from Permit Number 56409. Upon completion of this act, annual VOC emissions from tanks in the Diesel Cap may not exceed 15.23 tpy.

(16) Process units and activities with emissions subject to these limits are identified in Special Condition No. 45 and Attachments B and C.

(17) Hourly CO emissions from the DHT-3 Charge Heater during periods of MSS (EPN 43DHT3CMSS) are only authorized per Special Condition No. 49. Annual MSS emissions are covered by the annual emission limit for normal operations (EPN 43DHTCHTR).

* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

8,760 Hrs/year

** Compliance with annual emission limits is based on a rolling 12-month average.

Dated July 22, 2009