Permit Numbers 9708 and PSDTX861M2

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, sources, and related activities. 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.	Source Name (2)	Air Contaminant Name (3)	Emission	Rates
(1)			lbs/hour	TPY (4)
VOC CAPS: Combustion Units, Tanks, Process Vents, Loading, Flares, Vapor Combustors, Fugitives (5), Wastewater, Cooling Towers, Engines, Relief Valves, and Maintenance		VOC	2114.00	1510.00
VOC SUBCAP: (7) Tanks (S-001, S-009, S-021, and S-229), New Railcar Rack (L-15), Vapor Combustor (FL-7), Fugitives (F-MSAT and F-MSATLOAD) (5)		VOC	25.30	43.39
NO _x CAPS: (8) Combustion Units, Flares, Vapor Combustors, Process Vents, Loading, Engines, and Maintenance		NO _x	490.80	1701.00
NO _x SUBCAP: (7) Vapor Combustor (FL-7)		NO _x	2.33	1.29
CO CAPS: Combustion Units, Floor Combustors, Process Vents, Loading, Engine Maintenance	S	СО	1408.00	3275.00
CO SUBCAP: (7) Vapor Combustor (FL-7)		СО	7.17	4.22
SO₂ CAPS: Combustion Units, Fl. Combustors, Process Vents, Loading, Engine Maintenance	S	SO ₂	1120.00	2604.00

SO ₂ SUBCAP: (7)		SO ₂	0.09	0.03
Vapor Combustor (F	L-7)		2.00	0.00
PM CAPS:	J M			
Combustion Units, F	•	PM	138.00	569.80
Combustors, Proces	s vents, Engines,			
and Maintenance BENZENE CAPS:				
Tanks, Cooling Tow	ers Loading and	Benzene	11.90	18.34
Fugitives (5)	crs, Loading, and	Belizelie	11.50	10.54
BENZENE SUBCAR				
Tanks (S-001, S-009	,			
Railcar Rack (L-15),	-	Benzene	9.51	11.94
(VCU-2), Fugitives (I	F-MSAT and F-		0.02	
MSATLOAD) (5)				
H₂S CAPS:				
Flares, Process Ven	ts, Fugitives, and	H ₂ S	7.60	0.70
Maintenance	1 DO (11 OC)			
SULFURIC ACID CA	APS (H₂SO₄):	H ₂ SO ₄	12.40	54.10
Process Vents		2 4	_	
CHLORINE CAPS:		Cl ₂	0.40	0.50
Process Vents HCI CAPS:				
		HCI	7.10	4.29
Process Vents and	Maintenance		7.10	7.23
NH₃ CAPS:			800.40	164.80
Process Vents, Fugi	tives, and	NH ₃		
Maintenance				
MAINTENANCE EM	IISSIONS CAPS:	VOC	3671.97	46.52
(6)		NO _x	97.28	2.45
		CO	646.55	7.40
		SO ₂	1768.80	6.13
		H ₂ S	19.31	0.05
		HCI	4.00	0.002
		NH ₃	700.00	0.95
	T	PM	1.98	0.40
		NO _x	8.73	38.22
5.40	N= 40 D="	CO	34.12	66.33
B-10	No. 18 Boiler	VOC	1.21	5.28
		SO ₂	2.32	10.16
		PM/ PM ₁₀ /PM _{2.5}	1.67	7.30
		NO _x	8.73	38.23
B-11	No. 19 Boiler	CO VOC	18.93 1.21	82.93 5.28
D-TT	INO. TO DOUGI	SO ₂	2.32	10.16
		PM/PM ₁₀ /PM _{2.5}	1.67	7.30
Due in at Neural and 101000	1	141/1 141TO\1 1415'2	1.01	1.50

Emission Sources - Maximum Allowable Emission Rates

		NO _x	49.28	172.69
		CO	20.85	73.05
B-12	600# Boiler	VOC	1.33	4.66
D-12	000# builei			
		SO ₂	7.58	11.91
		PM	1.84	6.43
		NO _x	5.80	20.30
	300# Steam	CO	13.50	47.31
B-19	Boiler #1	VOC	0.89	3.11
	201101 1/12	SO ₂	4.60	16.28
		PM	1.20	4.30
		NO _x	5.80	20.30
	300# Steam	CO	13.50	47.31
B-20	Boiler #2	VOC	0.89	3.11
	Doller #2	SO ₂	4.60	16.28
		PM	1.20	4.30
		NO _x	5.80	20.30
	200# Ctoom	СО	13.50	47.31
B-21	300# Steam	VOC	0.89	3.11
	Boiler #3	SO ₂	4.60	16.28
		PM	1.20	4.30
		NO _x	23.65	82.85
	No. 10 Boiler	CO	17.80	22.23
B-3		VOC	0.40	1.41
20		SO ₂	2.09	3.53
		PM	0.56	1.95
		NO _x	17.01	59.59
		CO	7.57	18.32
B-4	No. 11 Boiler	VOC	0.48	1.59
D 7	No. 11 Donci	SO ₂	1.78	2.35
		PM	0.67	2.18
		NO _x	17.24	60.42
		CO	6.95	17.59
D.G	No. 12 Poilor			
B-6	No. 13 Boiler	VOC	0.44	1.55
		SO ₂	1.81	2.30
		PM	0.61	2.14
		NO _x	40.53	65.89
5 0	N - 45 5 3	CO	25.20	46.45
B-8	No. 15 Boiler	VOC	0.84	2.34
		SO ₂	3.22	4.05
		PM	1.17	3.23
		NOx	40.53	35.14
		CO	13.26	46.45
B-9	No. 16 Boiler	VOC	0.84	2.96
		SO ₂	3.61	5.57
		PM	1.17	4.08

Emission Sources - Maximum Allowable Emission Rates

		NO	21.02	40.40
		NO _x	31.83	46.46
	No. 1 Crude	CO	26.21	91.10
H-1	Charge Heater	VOC	1.67	6.26
	J. a. go . roato.	SO ₂	8.69	14.96
		PM/PM ₁₀ /PM _{2.5}	2.31	8.66
		NO _x	3.87	14.23
	No. 2 Crude	CO	7.80	14.11
H-11	Charge Heater	VOC	0.50	1.83
	(Anderson)	SO ₂	2.59	4.27
	,	PM/PM ₁₀ /PM _{2.5}	0.69	2.52
		NO _x	9.80	31.80
		CO	4.61	14.95
H-13	Gas Oil Frac.	VOC	0.29	0.95
11 10	Heater	SO ₂	1.53	1.97
		PM/PM ₁₀ /PM _{2.5}	0.41	1.32
			2.60	
		NO _x		11.39
	Linification Objective	CO	2.24	9.83
H-14	Unifiner Charge	VOC	0.14	0.63
	Heater	SO ₂	0.38	1.20
		PM	0.20	0.87
		NO _x	1.63	7.12
	No. 1	CO	3.06	13.39
H-15		VOC	0.19	0.70
П-13	Hydrotreater	SO ₂	0.84	1.41
	Charge Heater	PM	0.27	0.96
		NO _x	17.96	52.82
		CO	26.40	33.53
H-18	C.C.R. Charge	VOC	2.12	7.08
0	Heater	SO ₂	11.04	36.91
		PM/PM ₁₀ /PM _{2.5}	2.93	8.95
		NO _x	3.71	15.47
		CO	6.68	12.75
H-2	No. 1 Vacuum	VOC	0.43	1.77
Π-Δ	Charge Heater	SO ₂	2.21	3.91
		PM/PM ₁₀ /PM _{2.5}	0.59	2.45
		NO _x	4.06	15.76
	No. 2 Vacuum	CO	7.81	30.30
H-26	Charge Heater	VOC	0.50	1.93
	- Charge Hoater	SO ₂	2.59	4.22
		PM/PM ₁₀ /PM _{2.5}	0.69	2.67
		NO _x	1.35	0.76
	"P/P" Mole Sieve	CO	0.81	0.65
H-27	Regeneration	VOC	0.05	0.04
	Heater	SO ₂	0.27	0.22
	Tioutor	PM/PM ₁₀ /PM _{2.5}	0.07	0.06

H-28 Active Butane Oxygenate Heater NOx OC Oxygenate Heater OX OX OX					
H-28			NO _x	1.16	5.08
H-28 Oxygenate Heater SO2 Oxygenate Heater SO2 Oxygenate Heater SO2 PM Oxygenate Heater SO2 PM Oxygenate Heater Asphalt Tank CC Oxygenate Heater CC Oxygenate Heater Asphalt Tank CC Oxygenate Heater CC Oxygenate Heater Asphalt Tank CC Oxygenate Heater 11.12 Asphalt Tank CC Oxygenate Heater 12.12 Asphalt Tank CC Oxygenate Heater So2 Asphalt Tank Heater CC Oxygenate Heater CC Oxygenate Heater So2 Oxygenate Heater So2 Oxygenate Heater CC Oxygenate Heater So2 Oxygenater Oxyg		Activo Putano	CO	1.00	3.25
PM	H-28		VOC	0.06	0.28
H-30		Oxygenate neater	SO ₂	0.33	1.45
H-30			PM	0.09	0.39
H-30 Heaters (5501 and 5502) SO2 0.27 1.18 PM 0.07 0.31 NOx 0.44 1.92 CO 0.14 0.62 Heater SO2 0.05 0.20 PM 0.01 0.04 Heater SO2 0.05 0.20 PM 0.01 0.05 Tank Heaters CO 0.56 2.46 H-32 ("20MS" and VOC 0.19 0.82 PM 0.05 0.22 PM 0.05 0.28 PM 0.05 0.22 PM 0.09 0.41 PM 0.02 0.11 PM 0.02 0.08 PM 0.12 0.54 PM 0.19 0.81			NO _x	2.54	11.12
And 5502) SO₂ PM 0.07 0.31		Asphalt Tank	CO	0.82	3.57
PM 0.07 0.31 1.92 0.07 0.31 1.92 0.01 0.04 0.62 0.01 0.04 0.02 0.01 0.04 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.22 0.05 0.246 0.04 0.16 0.05 0.22 0.09 0.04 0.16 0.05 0.22 0.09 0.05 0.22 0.09 0.05 0.22 0.09 0.41 0.05 0.22 0.09 0.41 0.02 0.11 0.05 0.02 0.08 0.02 0.09 0.41 0.02 0.11 0.05 0.02 0.08 0.00	H-30	Heaters (5501	VOC	0.05	0.23
H-31B Tanks 27, 28 Heater Tanks 27, 28 Heater H-31B Tanks 27, 28 Heater Tank Heater NO _x SO ₂ PM Reater NO _x Reater N		and 5502)	SO ₂	0.27	1.18
H-31B Tanks 27, 28 Heater SQ2 DN			PM	0.07	0.31
H-31B			NO _x	0.44	1.92
Heater SO ₂ 0.05 0.20 PM 0.01 0.05 0.20 PM 0.01 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.05 0.20 0.56 0.246 0.06 0.56 0.246 0.06 0.06 0.06 0.06 0.06 0.06 0.06 0.		Topko 27, 20	CO	0.14	0.62
H-32	H-31B		VOC	0.01	0.04
PM		Healer	SO ₂	0.05	0.20
H-32 ("20MS" and ("20M6") SO ₂ 0.19 0.82 PM 0.05 0.22 PM 0.05 0.28 1.23 PM 0.02 0.08 PM 0.02 0.08 PM 0.02 0.011 PM 0.02 0.09 0.39 PM 0.02 0.09 0.39 PM 0.02 0.09 0.39 PM 0.02 0.09 0.39 PM 0.012 0.54 PM 0.019 0.014 0.59 PM 0.019 0.019 0.011 PM 0.019 0.001 PM 0.019 0.001 0.001 PM 0.001 0.001 0.001 PM 0.001 0.0				0.01	0.05
H-32 ("20MS" and "20M6") SO ₂ 0.19 0.82 0.05 0.22 0.05 0.22 0.05 0.22 0.05 0.22 0.05 0.22 0.05 0.22 0.05 0.22 0.05 0.22 0.05 0.22 0.05 0.22 0.08 0.05 0.22 0.08 0.02 0.08 0.02 0.09 0.41 0.00 0.00 0.00 0.00 0.00 0.00 0.00			NO _x	0.80	3.50
H-32C SO ₂ D.19 D.82 D.05 D.22 D.05 D.23 D.02 D.08 D.02 D.08 D.02 D.09 D.41 D.02 D.02 D.09 D.41 D.02 D.02 D.09 D.41 D.02 D.02 D.09 D.03 D.02 D.03		Tank Heaters	СО	0.56	2.46
H-32C	H-32	("20MS" and	voc	0.04	0.16
H-32C PM 0.05 0.22 NO _x 0.33 1.43 1.43 CO 0.28 1.23 1.23 NO _x 0.002 0.08 1.23 NO _x 0.009 0.41 PM 0.02 0.11 NO _x 1.99 8.74 NO _x 1.99 8.74 NO _x 1.99 8.74 NO _x 1.99 0.39			SO ₂	0.19	0.82
H-32C Asphalt Tank Heater "20M7" Asphalt Tank Heater "20M7" NOx OC SO2 0.02 0.08 0.09 0.41 0.002 0.11 NOx 1.99 8.74 0.002 0.11 NOx 1.99 8.74 0.10 6.16 0.10 0.09 0.39 0.39 0.39 0.40 0.10 0.10 0.10 0.54 0.10 0.10 0.10 0.54 H-33 S51, 121, 141, VOC 0.09 0.39 0.39 0.10 0.12 0.54 NOx 0.12 0.59 0.10 0.10 0.10 0.10 0.10 0.10 0.10 0.1		,		0.05	0.22
H-32C			NO _x	0.33	1.43
Heater "20M7"		A ambalt Tamir	СО	0.28	1.23
H-34 Stabilizer Reboiler Heater SO ₂ D.09 D.41 D.002 D.11 D.002 D.11 D.003 D.003 D.003 D.009 D.	H-32C		VOC	0.02	0.08
PM 0.02 0.11 NOx 1.99 8.74 Tank Heaters 34, CO 1.40 6.16 6.		Healer Zuwi	SO ₂	0.09	0.41
H-33				0.02	0.11
H-33			NO _x	1.99	8.74
And 552 SO ₂ D.46 2.04 PM 0.12 0.54 NO _x 3.08 20.45 C.C.D.R. CO 2.17 8.68 Stabilizer Reboiler VOC 0.14 0.59 Heater SO ₂ D.68 1.21 PM 0.19 0.81 NO _x 1.59 6.99 Tank "300M2" CO 1.12 4.93 Heaters (4 VOC 0.07 0.31 Stacks) SO ₂ 0.37 1.63		Tank Heaters 34,	СО	1.40	6.16
PM 0.12 0.54 NO _x 3.08 20.45 C.C.D.R. CO 2.17 8.68 NO _x Stabilizer Reboiler VOC 0.14 0.59 NO _x 0.68 1.21 PM 0.19 0.81 NO _x 1.59 6.99 Tank "300M2" CO 1.12 4.93 NO _x NO _x 1.59 0.31 NO _x NO	H-33	551, 121, 141,	VOC	0.09	0.39
PM 0.12 0.54 NO _x 3.08 20.45 C.C.D.R. CO 2.17 8.68 NO _x Stabilizer Reboiler VOC 0.14 0.59 NO _x 0.68 1.21 PM 0.19 0.81 NO _x 1.59 6.99 Tank "300M2" CO 1.12 4.93 NO _x NO _x 1.59 0.31 NO _x NO		and 552	SO ₂	0.46	2.04
H-34 C.C.D.R. CO 2.17 8.68 NOx NOx 1.59 6.99 Tank "300M2" CO Tacks) SO ₂ NOx CO 1.12 4.93 NOx N				0.12	0.54
H-34 Stabilizer Reboiler VOC			NO _x	3.08	20.45
H-34 Stabilizer Reboiler VOC		C.C.D.R.	СО	2.17	8.68
H-35 PM 0.19 0.81 NO _x 1.59 6.99 CO 1.12 4.93 Heaters (4 VOC 0.07 0.31 Stacks) SO ₂ 0.37 1.63	H-34		VOC	0.14	
H-35 PM 0.19 0.81 NO _x 1.59 6.99 CO 1.12 4.93 Heaters (4 VOC 0.07 0.31 Stacks) SO ₂ 0.37 1.63		Heater	SO ₂	0.68	1.21
H-35 Tank "300M2" CO 1.12 4.93 Heaters (4 VOC 0.07 0.31 Stacks) SO ₂ 0.37 1.63				0.19	0.81
H-35 Heaters (4 VOC 0.07 0.31 Stacks) SO ₂ 0.37 1.63			NO _x	1.59	6.99
Stacks) SO ₂ 0.37 1.63		Tank "300M2"	CO	1.12	4.93
	H-35	Heaters (4	VOC	0.07	0.31
PM 0.10 0.43		Stacks)	SO ₂	0.37	1.63
			PM	0.10	0.43

Emission Sources - Maximum Allowable Emission Rates

		NO	1.70	7.00
	No 2 Nonbibs	NO _x	1.78	7.80
11.00	No. 2 Naphtha	CO	4.86	10.65
H-36	Hydrotreater	VOC	0.31	0.97
	Charge Heater	SO ₂	1.11	1.70
		PM	0.43	1.34
		NO _x	6.40	15.97
	No. 2 Naphtha	CO	5.41	13.51
H-37	Hydrotreater	VOC	0.16	0.65
	Des2 Reboiler	SO ₂	0.91	1.65
		PM	0.22	0.89
		NO _x	13.58	59.46
	#2 Reformer	CO	29.45	81.85
H-38	Charge Heater	VOC	1.88	5.02
	Charge Fleater	SO ₂	6.73	10.28
		PM	2.59	6.93
		NO _x	3.47	12.78
	#2 Reformer	CO	2.44	9.01
H-39	Stabilizer Reboiler	VOC	0.16	0.44
	Heater	SO ₂	0.89	0.89
		PM/PM ₁₀ /PM _{2.5}	0.22	0.60
		NO _x	10.21	37.17
		CO	6.75	12.28
H-40	P.D.A. Asph. Htr.	VOC	0.43	1.00
	•	SO ₂	2.45	1.59
		PM/PM ₁₀ /PM _{2.5}	0.59	1.37
		NOx	16.40	71.83
	No. 0 Omeda	СО	26.18	43.57
H-41	No. 2 Crude	voc	1.67	6.99
	Charge Heater	SO ₂	8.36	14.12
		PM	2.31	9.66
		NO _x	3.64	15.28
	11 -11	co	7.51	15.76
H-42	Hydrocracker	voc	0.48	1.98
	Recycle Heater	SO ₂	2.49	2.99
		PM/PM ₁₀ /PM _{2.5}	0.66	2.73
		NO _x	3.31	14.49
	Hydrocracker	co	7.37	16.13
H-43	"DEC4" Reboiler	voc	0.47	1.85
	Heater	SO ₂	2.36	3.84
		PM	0.65	2.55
		NO _x	2.66	11.67
		CO	5.93	12.99
H-45	#1 Hydrotreater	voc	0.35	0.73
	Charge Heater	SO ₂	0.99	3.18
		PM	0.48	1.01

		NO	0.52	22.77
		NO _x	9.53	32.77
		CO	17.53	60.27
H-46	C.C.R. Interheater	VOC	1.12	3.84
		SO ₂	5.81	8.79
		PM/PM ₁₀ /PM _{2.5}	1.54	5.31
		NO _x	0.90	3.95
	Asphalt Blowstill	CO	1.69	2.89
H-47	Heater	VOC	0.06	0.21
	ricalci	SO ₂	0.27	0.35
		PM	0.09	0.28
		NO _x	3.42	14.98
	Turbino Fuel	СО	6.67	14.61
H-48	Turbine Fuel	VOC	0.56	2.46
	HDSU Heater	SO ₂	2.92	4.26
		PM/PM ₁₀ /PM _{2.5}	0.77	3.39
		NO _x	0.53	2.33
	Asphalt Tank	co	1.12	4.93
H-51	Heater 300M3 (4	VOC	0.07	0.31
	Stacks)	SO ₂	0.37	1.63
	Guaria,	PM	0.10	0.43
		NO _x	3.39	14.87
		co	2.39	10.48
H-6	Dago Heater	voc	0.15	0.44
	Dago Hoato	SO ₂	0.60	0.71
		PM	0.21	0.59
		NO _x	1.26	5.54
	No. 4	CO	2.81	12.33
H-64	Hydrotreater	voc	0.18	0.71
1104	Charge Heater	SO ₂	0.86	1.34
	Charge Fleater	PM	0.25	0.96
		NO _x	4.25	18.63
		CO	9.90	43.40
H-70	No. 2 Crude	VOC	0.66	2.87
11-70	Charge Heater		3.40	14.90
		SO ₂ PM	0.90	3.97
			2.13	6.06
		NO _x		
	No. 2 Ve assure	CO	5.00	14.10
H-71	No. 3 Vacuum	VOC	0.30	0.90
	Heater	SO ₂	1.70	4.80
		PM	0.45	1.29

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H-72	PDA Asphalt Heater	NO _x CO VOC SO ₂ PM	1.55 3.60 0.20 1.20 0.30	6.78 15.80 1.00 5.40 1.40
H-73	No. 3 Crude Heater- Petrochem (North)	NO _x CO VOC SO ₂ PM	3.80 8.80 0.60 3.00 0.80	16.52 38.40 2.50 13.20 3.50
H-74	Hydrocracker Recycle Heater	NO _x CO VOC SO ₂ PM	4.20 8.10 0.50 2.80 0.70	15.25 35.50 2.30 12.20 3.20
H-75	Hydrocracker "DEC4" Reboiler Heater	NO _x CO VOC SO ₂ PM	3.80 7.40 0.50 2.60 0.70	13.98 32.50 2.20 11.20 3.00
H-76	Diesel Hydrotreater Charge Heater	NO _x CO VOC SO ₂ PM	2.01 4.86 0.31 1.61 0.43	8.81 21.29 1.36 7.06 1.88
H-77	No. 1 Reformer Charge Heater	NO _x CO VOC SO ₂ PM	12.29 28.60 1.89 9.83 2.62	53.82 125.26 8.29 43.04 11.46
H-78	No. 1 Reformer Interheaters	NO _x CO VOC SO ₂ PM	3.67 8.55 0.57 2.94 0.78	16.09 37.46 2.48 12.87 3.43
H-79	No. 1 Ref. Stabilizer Reboiler	NO _x CO VOC SO ₂ PM	1.16 2.70 0.18 0.93 0.25	5.08 11.83 0.78 4.06 1.08

Emission Sources - Maximum Allowable Emission Rates

		NO	4.00	20.52
	11011	NO _x	4.69	20.52
	HCU	CO	7.22	28.77
H-8	Fractionation	VOC	0.48	1.42
	Charge Heater	SO ₂	1.93	3.69
		PM	0.66	1.96
		NO _x	3.05	13.36
	FCC Gas HDS	CO	8.33	36.46
H-80	Charge Heater	VOC	0.53	2.32
	Onarge ricator	SO ₂	2.33	5.03
		PM	0.73	3.21
		NO _x	0.31	1.36
		CO	0.70	3.20
H-81	C4 ISOM Heater	VOC	0.05	0.20
		SO ₂	0.20	1.09
		PM	0.07	0.29
		NO _x	5.80	25.40
		co	13.50	59.10
H-82	Coker Heater	voc	0.89	3.90
		SO ₂	4.60	20.30
		PM	1.20	5.40
		NO _x	0.39	1.69
	Polymer Modified Asphalt Heater	co	0.90	3.90
H-83		voc	0.06	0.26
11.00		SO ₂	0.30	1.36
		PM	0.08	0.36
		NO _x	3.79	16.60
		CO	8.80	38.60
H-84	No. 2 Reformer	voc	0.58	2.56
1104	No. 1 Interheater	SO ₂	3.00	13.30
		PM	0.80	3.50
		NO _x	1.52	6.67
		CO	3.50	15.50
H-85	No. 2 Ref. Stab.	VOC	0.20	1.00
H-00	Reboiler	SO ₂	1.20	5.30
		PM		
			0.30	1.40
	No. 2 Naphtha	NO _x	2.00	8.81
11.06	Hydrotreater .	CO	4.70	20.50
H-86	Charge Heater	VOC	0.30	1.40
	(Final)	SO ₂	1.60	7.00
	<u> </u>	PM	0.40	1.90
		NO _x	0.72	3.15
11.07	SRU No. 3 Hot Oil	CO	1.70	7.30
H-87	Heater	VOC	0.10	0.49
	1,000.0	SO ₂	0.58	2.50
		PM	0.15	0.67

	79 3.46
I ACIA DIGAL LAGA	48 0.43
H-88 Heater VOC U.	0.03
$ SO_2 $ 0.	16 0.50
	0.04
	.08 57.31
Heater- CO 7.	48 16.38
H-9 Petrochem VOC 0.	37 1.22
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	36 2.16
(South) PM 0.	51 1.68
F-20 No. 1 Refinery Cooling Tower VOC 2.	62 11.46
F-21 Gasoline Plant Cooling Tower (4) VOC 1.	75 7.68
F-47 No. 2 Refinery Cooling Tower VOC 1.	29 5.63
F-93 No. 3 Refinery Cooling Tower VOC 1.	89 8.28
NO _x 4.	56 19.98
Linifipor Engine CO 0.	56 2.44
E-7 Unifiner Engine VOC 0.	17 0.76
$\begin{array}{ c c c c c c }\hline & & & & & & & & & & & & & & & & & & &$	0.01
PM 0.	07 0.29
NO _x 8.	21 0.99
	.38 1.98
Drum Flare VOC 30	.15 5.52
SO_2 0.	0.01
	42 7.97
No. 2 Main CO 12	.35 40.60
FL-8 Refinery Flare VOC 7.	85 25.75
(10) SO2 1.	10 1.09
H_2S 0.0	0.012
NO _x 12	.67 11.89
	.28 61.27
FL-1 Refinery Flare VOC 41	.51 38.96
(10) SO ₂ 35	.10 23.37
H_2S 4.	09 0.25
NO _x 16	.73 6.95
CO 87	.95 50.17
	L.06 87.26
SO ₂ 23	.35 7.68
H_2S 1.	79 0.08

		NO _x	8.63	7.50
		CO	44.48	38.62
FL-4	HCU Flare (10)	voc	31.66	27.49
	110011010(20)	SO ₂	35.47	11.44
		H ₂ S	4.20	0.12
		NO _x	1.90	4.17
		co	9.70	21.26
FL-6	Wastewater Flare	voc	4.54	9.95
		SO ₂	3.41	1.21
		NO _x	40.46	34.31
Combined Compliane	ce Short Term and	co	210.06	190.66
Annual Caps for Flar		voc	352.09	179.46
4, and FL-8 (11)	00, 0,	SO ₂	19.05	15.69
,, = 0 (==)		H ₂ S	6.07	0.27
	FGR Oily Water			
FGR-SUMP	Sump	VOC	0.03	0.07
	Coker PM			
F-Coke PM	Fugitives	PM	0.41	1.35
		NO _x	6.12	9.98
	Loading Rack Vapor Combustor	CO	17.79	27.45
FL-7		voc	18.01	14.20
	Tapor Compactor	SO ₂	0.13	0.06
	Railcar Loading			
L-13	Rack	VOC	0.25	0.10
	North Railcar			
L-14	Rack	VOC	18.35	0.81
_	Asphalt Truck		_	
L-2	Loading Rack	VOC	4.49	2.28
	Railcar/ Truck			
L-5/L-11	Loading Rack	VOC	13.15	9.05
	Asphalt Railcar			
L-7	Rack	VOC	0.42	1.37
	Sulfuric Acid Plant			
V-29	Vent	SO ₂	21.67	70.17
	VOIIL	NO _x	2.15	3.78
		CO	42.37	74.33
V-22	Asphalt Blowstill	VOC	2.15	3.78
v 22	Vent	SO ₂	2.16	4.35
		PM	7.18	12.60
	1	FIVI	1.10	12.00

V-20	F.C.C.U. (Fluidized Catalytic Cracking Unit)	NO_x CO VOC SO_2 PM NH_3 (9) H_2SO_4	220.11 37.80 10.55 459.69 80.00 40.74 12.40	163.36 93.07 38.19 138.69 294.02 146.00 41.98
V-18	No. 1 Reformer Cat Regenerator Vent	CO VOC	3.27 0.62	14.31 2.72
V-21	No. 2 Reformer Cat Regenerator Vent	CO	70.00 0.03	3.36 0.08
V-13	Soda Ash Silo	PM/PM ₁₀ /PM _{2.5}	0.09	0.02
V-14	Lime Silo Vent	PM/PM ₁₀ /PM _{2.5}	0.09	0.02
V-17	FCC Catalyst Silo Vent	PM	0.01	0.01
V-5	SRU No. 1 Incinerator	NO _x CO VOC SO ₂ PM/PM ₁₀ /PM _{2.5}	0.40 1.37 0.12 6.87 0.26	1.75 5.98 0.53 21.54 1.13
V-16	SRU No. 2 Incinerator	NO _x CO VOC SO ₂ PM/PM ₁₀ /PM _{2.5}	0.56 13.66 0.20 10.96 0.84	2.45 59.82 0.87 48.01 3.69
V-28	SRU No. 3 Incinerator	NO _x CO VOC SO ₂ PM	1.60 5.02 0.54 28.69 0.12	7.01 21.99 2.38 125.64 0.52
S-044	Tank 144	Caustic	0.01	0.01
S-142	Tank 232	Caustic	0.01	0.01
CARBON CAN	Carbon Canister System Fugitives (CAS1 - CAS7)	VOC	5.04	11.04

S-001, S-002, S-003, S-004, S-005, S-006, S-007, S-008, S-009, S-010, S-011, S-012, S-013, S-014, S-015, S-016, S-017, S-018, S-019, S-020, S-021, S-022, S-023, S-024, S-025, S-026, S-027, S-028, S-031, S-032, S-033, S-035, S-037, S-038, S-039, S-040, S-042, S-043, S-045, S-046, S-049, S-052, S-053, S-055, S-056, S-057, S-058, S-059, S-060, S-063, S-064, S-065, S-066, S-067, S-068, S-069, S-070, S-071, S-072, S-073, S-074, S-075, S-076, S-086, S-090, S-095, S-137, S-138, S-139, S-140, S-141, S-143, S-144, S-150, S-168, S-173, S-174, S-175, S-176, S-177, S-179, S-180, S-183, S-184, S-186, S-187, S-192, S-194, S-195, S-196, S-197, S-198, S-199, S-200, S-202, S-203, S-204, S-209, S-210, S-211, S-212, S-213, S-214, S-215, S-216, S-217, S-218, S-219, S-220, S-221, S-222, S-223, S-224, S-225, S-229

Sub cap for VOC 141.70 380.94

Permit by rule (PBR) sources point identification - either specific equipment designation or emission point number incorporated by a plot plan. [eference remain blatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1. authorized by the local oxides of nitrogen PBR(s) as listed point monoxide PBR Registration Mumbers are a name or fugitive source name. Administrative Code § 101.1.
reference iffic point source names. For fugitive sources, use an area name or fugitive source name. Sources remain blatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1. authorized by the distribution monoxide PBR(s) as listed properties as defined in Title 30 Texas Administrative Code § 101.1. PBR(s) as listed properties as defined in Title 30 Texas Administrative Code § 101.1.
reference iffic point source names. For fugitive sources, use an area name or fugitive source name. Sources remain plat plan. Sources remain plan plan. Sources remain plan plan plan plan plan plan plan pla
Administrative Code § 101.1. authorized by the local exides of nitrogen PBR(s) as listed arbon monoxide below - sulfur dioxide
Authorized by the did exides of nitrogen PBR(s) as listed arbon monoxide below: - sulfur dioxide
PBR(s) as listed monoxide below: - sulfur dioxide
below: - sulfur dioxide
below - sulfur dioxide
l PBR Registration. Number 87:455
' ' ' H2S' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
E-1 H ₂ SO ₄ - sulfuric acid
No. 14te4t= Compressorteggineegg
NO _x NH ₃ - ammonia
PM - particulate matter, suspended in the atmosphere, including PM10 and PM2.5.
PM ₁₀ - particulate matter equal to or less 1th 80 10 microns in diameter.
PM _{2.5} - particulate matter equal to of Pess than 2.5 microns in diameter 0.36 1.56
(4) Compliance with annual emission limits (200 per year) is based on a 12 months rolling per 10049
(5) Fugitive emissions are an estimate on sould not be considered as a maximum allowable
emission rate. $PM/PM_{10}/PM_{2.5}$ 0.05 0.20
(6) Emission rate is an estimate and is eNOrceable through compliance with 9Ae applicable 18p80ia
condition(s) and permit application representations 0.36 1.56
In accordance with Special Condition WDC 59, the maintenance emission daps become effective
on December 15, 2010. The interins caintenance emission caps are ceffective from Jorce 17
2010 through December 15, 2010. PM/PM ₁₀ /PM _{2.5} 0.05 0.20
で次-0万he emission rates listed for the VOC, NOx, and CO subcaps are included in the total VOC, NO
F-Centre Cap for the site. These subcaps were established to establish that the Benzen
NO _x Concentrate Extraction System project was not subject to PSD review.
(8) The emission caps have been carried forward from the flexible permit and do not include MS
emissions. The only emission caps that areolimiting (lower than the sum of the subcaps an
individual emission rate limits for that accontaminant) are those for NO _{×-0.14} 0.63
(9) FCCU contribution to the ammonia Q_{OC} 0.01 0.01
(10) Pre-FGRS limits. SO ₂ 0.01 0.01 0.01 0.01
(11) Post-FGRS limits.

Date: February 4, 2013