

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 48982

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**
22BFUG	O <sub>2</sub> Gas Plant Fugitives (4)	VOC	0.95	4.18
	After 12/31/2006	VOC	0.87	3.81
23BC201	Atomospheric Tower Furnace	NO <sub>x</sub>	14.28	62.55
		CO	14.28	62.55
		VOC	1.93	8.43
		SO <sub>2</sub>	9.52	20.85
		PM	2.66	11.65
23CWT7	No. 7 Cooling Tower	VOC	0.47	2.08
23FUG	Crude Unit Fugitives (4)	VOC	12.27	53.75
	After 12/31/2006	VOC	11.14	48.78
27BA1000	AC@ Unifiner Reactor Charge Heater	NO <sub>x</sub>	3.04	13.31
		CO	2.55	11.18
		VOC	0.17	0.73
		SO <sub>2</sub>	0.83	1.10
		PM	0.23	1.01
27EA1124	Platformer Primary Heater 27BA1100	NO <sub>x</sub>	6.54	28.63
		CO	4.86	21.28
		VOC	0.32	1.39
		SO <sub>2</sub>	1.57	1.80
		PM	0.44	1.93

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
	After 12/31/2006	NO <sub>x</sub>	3.59	15.71
		CO	6.55	28.68
		VOC	0.32	1.39
		SO <sub>2</sub>	1.57	1.80
		PM	0.44	1.93
27EA1124	Platformer Reactor Heater 27BA1101	NO <sub>x</sub>	2.94	12.88
		CO	2.47	10.82
		VOC	0.16	0.71
		SO <sub>2</sub>	0.80	0.92
		PM	0.22	0.98
27EA1124	Platformer Nos. 2 and 3 Reactor Heater 27BA1103	NO <sub>x</sub>	3.96	17.35
		CO	3.29	14.43
		VOC	0.22	0.94
		SO <sub>2</sub>	1.07	1.23
		PM	0.22	0.98
	After 12/31/2006	NO <sub>x</sub>	2.38	10.41
		CO	1.98	8.66
		VOC	0.13	0.57
		SO <sub>2</sub>	0.64	0.74
		PM	0.18	0.78
27BA1104	Platformer Stabilizer Tower Reboiler	NO <sub>x</sub>	2.84	12.45
		CO	2.39	10.46
		VOC	0.16	0.68
		SO <sub>2</sub>	0.77	0.88
		PM	0.22	0.95
27BA1105	Platformer Rerun Tower Reboiler	NO <sub>x</sub>	4.24	18.55
		CO	4.94	21.64
		VOC	0.32	1.42
		SO <sub>2</sub>	1.60	1.84

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			lb/hr	TPY**
		PM	0.22	0.95
	After 12/31/2006	NO <sub>x</sub>	2.75	12.06
		CO	3.21	14.07
		VOC	0.21	0.92
		SO <sub>2</sub>	1.04	1.20
		PM	0.29	1.27
27BA1106	Platformer Pre-fract Reboiler	NO <sub>x</sub>	3.73	16.32
		CO	3.13	13.71
		VOC	0.20	0.90
		SO <sub>2</sub>	1.01	1.14
		PM	0.28	1.24
27CO1	Compressor Engine No. 1 Platformer	NO <sub>x</sub>	15.68	68.69
		CO	5.50	24.11
		VOC	0.18	0.79
		SO <sub>2</sub>	<0.01	0.02
		PM	0.06	0.25
27CO2	Compressor Engine No. 2 Platformer	NO <sub>x</sub>	8.60	37.68
		CO	2.30	10.08
		VOC	0.18	0.79
		SO <sub>2</sub>	<0.01	0.02
		PM	0.06	0.25
27CO3	Compressor Engine No. 3 Platformer	NO <sub>x</sub>	8.73	38.22
		CO	10.31	45.17
		VOC	0.18	0.79
		SO <sub>2</sub>	<0.01	0.02
		PM	0.06	0.25
27CO4	Compressor Engine No. 4 Platformer	NO <sub>x</sub>	8.79	38.49
		CO	3.79	16.60
		VOC	0.18	0.79
		SO <sub>2</sub>	<0.01	0.02

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
		PM	0.06	0.25
27CWT2	No. 2 Cooling Tower	VOC	0.66	2.87
27AFUG	AC@ Unifiner Fugitives (4)	VOC	1.07	4.68
	After 12/31/2006	VOC	1.04	4.54
27FUG	Platformer Fugitives (4)	VOC	2.58	11.31
	After 12/31/2006	VOC	2.41	10.58
28BA1200	AA@ Unifiner Reactor	NO <sub>x</sub>	2.75	12.02
	Charge	CO	2.31	10.10
		VOC	0.15	0.66
		SO <sub>2</sub>	0.75	0.88
		PM	0.21	0.91
28FUG	AA@ Unifiner Fugitives (4)	VOC	0.74	3.24
	After 12/31/2006	VOC	0.69	3.03
29BA1300	AB@ Unifiner Reactor	NO <sub>x</sub>	5.05	22.11
	Charge Heater	CO	4.12	18.04
		VOC	0.27	1.18
		SO <sub>2</sub>	1.33	1.53
		PM	0.37	1.63
	After 12/31/2006	NO <sub>x</sub>	3.03	13.27
		CO	2.47	10.82
		VOC	0.16	0.71
		SO <sub>2</sub>	0.80	0.92
		PM	0.22	0.98
29FUG	AB@ Unifiner Fugitives (4)	VOC	0.89	3.89

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
	After 12/31/2006	VOC	0.82	3.57
39CWT8	No. 8 Cooling Tower	VOC	0.21	0.92
41BA101	AD@ Unifiner Reactor Charge Heater	NO <sub>x</sub>	1.96	8.59
		CO	1.65	7.21
		VOC	0.11	0.47
		SO <sub>2</sub>	0.53	0.61
		PM	0.15	0.65
41BA102	AD@ Unifiner Rerun Tower Reboiler	NO <sub>x</sub>	2.65	11.59
		CO	2.22	9.74
		VOC	0.15	0.64
		SO <sub>2</sub>	0.72	0.79
		PM	0.20	0.88
41CO1	Compressor Engine No. 1 AD@ Unifiner	NO <sub>x</sub>	3.81	16.70
		CO	5.27	23.09
		VOC	0.12	0.53
		SO <sub>2</sub>	<0.01	0.01
		PM	0.04	0.17
41CO2	Compressor Engine No. 2 AD@ Unifiner	NO <sub>x</sub>	5.29	23.16
		CO	13.63	59.69
		VOC	0.12	0.53
		SO <sub>2</sub>	<0.01	0.01
		PM	0.04	0.17
41FUG	AD@ Unifiner Fugitives (4)	VOC	2.12	9.28
	After 12/31/2006	VOC	1.87	8.20
44CWT9	No. 9 Cooling Tower	VOC	0.32	1.38
44FB3002	ROSE Flush Oil Tank	VOC	<0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
44AFUG	Sats Gas Fugitives (4) After 12/31/2006	VOC	1.39	6.09
		VOC	1.29	5.65
47AD5401	API Separator Diversion Sump  After 12/31/2005	VOC	<0.01	0.04
		VOC	<0.01	<0.01
47AD5402	API Oil Pit	VOC	2.00	0.14
47AD5403	Floc Pit  After 12/31/2005	VOC	4.42	19.35
		VOC	<0.01	<0.01
47AD5405	API Muck Pit	VOC	2.00	0.18
47AD5407	Lift Station  After 12/31/2005	VOC	0.03	0.12
		VOC	0.04	0.19
47AD5409	DAF Unit  After 12/31/2005	VOC	2.87	12.59
		VOC	5.51	24.15
47FA5	Equalization Tank	VOC	<0.01	<0.01
47FB323	API Separator Recovered Oil Tank	VOC	14.19	1.60
47GF5401	API Separator	VOC	0.14	0.62
47FUG	Wastewater Treater Fugitives (4)  After 12/31/2006	VOC	0.89	3.92
		VOC	0.70	3.05

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
81BA25	Boilerhouse Hot Oil Heater	NO <sub>x</sub>	1.96	8.59
		CO	1.65	7.21
		VOC	0.11	0.47
		SO <sub>2</sub>	0.53	0.61
		PM	0.15	0.65
81BF12	Boiler No. 12 (prior to 12/31/06)	NO <sub>x</sub>	8.93	39.10
		CO	0.06	0.26
		VOC	0.35	1.54
		SO <sub>2</sub>	1.73	1.97
		PM	0.48	2.12
81BF12	Boiler No. 12 (May-June 2007) (5)	NO <sub>x</sub>	8.99	1.51
		CO	0.06	0.01
		VOC	0.35	0.06
		SO <sub>2</sub>	1.80	0.30
		PM	0.48	0.08
81BF14	Boiler No. 14	NO <sub>x</sub>	9.20	40.30
		CO	0.06	0.26
		VOC	0.35	1.54
		SO <sub>2</sub>	1.73	1.97
		PM	0.48	2.12
81BF15	Boiler No. 15	NO <sub>x</sub>	1.82	47.39
		CO	0.06	0.26
		VOC	0.35	1.54
		SO <sub>2</sub>	1.73	1.97
		PM	0.48	2.12
81BF16	Boiler No. 16	NO <sub>x</sub>	9.47	41.47
		CO	0.06	0.26
		VOC	0.35	1.54
		SO <sub>2</sub>	1.73	1.97
		PM	0.48	2.12

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
81BF7	Boiler No. 7	NO <sub>x</sub>	9.05	39.64
		CO	0.10	0.42
		VOC	0.62	2.72
		SO <sub>2</sub>	3.07	3.50
		PM	0.86	3.75
81FUG	Boilerhouse Fugitives (4)	VOC	0.50	2.21
	After 12/31/2006	VOC	0.48	2.11
9040LOAD	No. 4 Dock	VOC	817.69	17.82
	After 12/31/2006	VOC	4.40	0.01
9055LOAD	Harris Dock (No. 5 Dock)	VOC	0.07	<0.01
9058LOAD	AA@ Pump Rail Loading	VOC	<0.01	<0.01
9059LOAD	B. B. Rack-Truck Loading	VOC	<0.01	<0.01
9060LOAD	TRAWEEK Dock	VOC	1834.89	69.34
90CPI2001	Outfall 007 CPI Separator	VOC	<0.01	1.12
90CPI8301	Outfall 003CPI Separator	VOC	0.27	1.18
90FB208	No. 208 Tank	VOC	20.55	3.61
90FB214	No. 214 Tank	VOC	103.74	13.40
90FB221	No. 221 Tank	VOC	103.74	39.47
90FB708	No. 708 Tank	VOC	0.71	0.02
90FB721	No. 721 Tank	VOC	6.64	0.01



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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
90FB735	No. 735 Tank	VOC	0.12	0.37
90AFUG	Crude Tank Farm Fugitives (4)	VOC	2.00	8.77
	After 12/31/2006	VOC	1.61	7.06
90BFUG	16-Acre Tank Farm Fugitives (4)	VOC	0.65	2.86
	After 12/31/2006	VOC	0.50	2.18
90CFUG	Refrigerated Storage Fugitives (4)	VOC	6.39	1.46
	After 12/31/2006	VOC	1.31	5.73
90FUG	AA@ Tank Farm Fugitives (4)	VOC	11.24	49.22
	After 12/31/2006	VOC	10.16	44.51
9157LOAD	AB@ Pump Railcar Rack	VOC	5.16	0.07
9160LOAD	AB@ Pump Truck Rack	VOC	5.16	0.09
91CPI0301	300-Tank Farm CPI Separator	VOC	0.14	0.61
91CPI0401	400-Tank Farm CPI Separator	VOC	0.08	0.35
91CPI901	900-Tank Farm CPI Separator	VOC	0.14	0.61
91FB312	No. 312 Tank	VOC	1.33	0.06
91FB335	No. 335 Tank	VOC	0.21	0.02
91FB348	No. 348 Tank	VOC	5.16	0.35
91FB349	No. 349 Tank	VOC	5.16	0.35

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY**
91FB356	No. 356 Tank	VOC	5.88	0.59
91FB368	No. 368 Tank	VOC	19.65	0.19
91FB401	No. 401 Tank	VOC	1.37	4.21
91FB406	No. 406 Tank	VOC	78.12	3.21
91FB407	No. 407 Tank	VOC	40.96	1.34
91FB409	No. 409 Tank	VOC	26.83	5.99
91FB414	No. 414 Tank	VOC	0.88	1.54
91FB420	No. 420 Tank	VOC	1.06	2.08
91FB421	No. 421 Tank	VOC	78.12	1.30
91FB422	No. 422 Tank	VOC	0.84	2.67
91FB423	No. 423 Tank	VOC	0.70	0.14
91FB914	No. 914 Tank	VOC	3.85	6.07

	After 12/31/2005	VOC	3.55	3.24
91AFUG	400-Group Tank Farm Fugitives (4)	VOC	1.40	0.32
	After 12/31/2006	VOC	0.30	1.29
91BFUG	900-Group Tank Farm Fugitives (4)	VOC	2.10	9.21
	After 12/31/2006	VOC	1.84	8.06
91FUG	300-Group Tank Farm Fugitives (4)	VOC	0.78	3.43
	After 12/31/2006	VOC	0.73	3.21

- (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<sub>x</sub> - total oxides of nitrogen  
CO - carbon monoxide  
SO<sub>2</sub> - sulfur dioxide  
PM - particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.  
PM<sub>10</sub> - 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.
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) Boiler No. 12 is authorized to be returned to service and operated for a period not to exceed 336 hours during May and June 2007.

\* Emission rates are based on and the facilities are limited by the following maximum operating schedule:  
\_\_\_Hrs/day \_\_\_Days/week \_\_\_Weeks/year or 8,760 Hrs/year

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

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Dated February 17, 2015