EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number30513

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**
7-0-0	Unit 7 Piping Fugitives (4)	VOC	0.90	3.94
11-0-0	Unit 11 Piping Fugitives (4)	VOC	4.03	17.66
11-36-1	Unit 11 Prefac Furnace	NO_x	3.60	15.77
		CO	4.94	21.64
		VOC	0.32	1.42
		SO_2	1.36	1.87
		PM_{10}	0.45	1.96
11-36-5	Unit 11 HDS Furnace	NO_x	4.20	18.40
		CO	5.76	25.25
		VOC	0.38	1.65
		SO_2	1.59	2.18
		PM_{10}	0.52	2.28
14-0-0	Unit 14 Piping Fugitives (4)	VOC	4.83	21.14
14-36-3	Unit 14 Prefac Furnace	NO_x	4.80	21.02
		CO	6.59	28.86
		VOC	0.43	1.89
		SO2	1.82	2.49
		PM_{10}	0.60	2.61
14-36-4	Unit 14 HDS Furnace	NO_x	3.30	14.45
		CO	4.53	19.84
		VOC	0.30	1.30
		SO_2	1.25	1.71
		PM_{10}	0.41	1.79

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
17-0-0	Unit 17 Piping Fugitives (4)	VOC	0.18	0.81
35-0-0	CCR Fugitives (4)	VOC	4.71	20.61
35-36-1	CCR Furnace	NO_x	24.00	105.12
		CO 32.94	144.28	
		VOC 2.16	9.45	
		SO_2 9.09	12.44	
		PM_{10} 2.98	13.05	
35-95-102	Caustic Scrubber	HCl	0.08	0.34
		Cl_2 0.04	0.19	
54-22-2	Unit 11 Cooling Tower	VOC	0.39	1.72
		Ethylene	0.01	0.05
		Propylene	0.01	0.05
54-22-8	Unit 14 Cooling Tower	VOC	0.52	2.30
		Ethylene	0.02	0.07
		Propylene	0.02	0.07
54-22-11	Unit 7 Cooling Tower	VOC	0.08	0.37
		Ethylene	0.01	0.01
		Propylene	0.01	0.01
54-22-18	Unit 35 Cooling Tower	VOC	0.57	2.48
		Ethylene	0.02	0.07
		Propylene	0.02	0.07
56-61-1	Flare 1	NO_x	0.52	2.27
		CO 4.44	19.44	
		VOC 6.34	12.35	
		SO_2 0.01	0.04	
56-61-11	Flare 11	NO_x	0.07	0.29

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
	(Routine)	CO	0.34	1.50
		VOC (5)	1.35	5.91
		SO_2 0.12	0.53	
		Ethylene	0.01	0.01
		Propylene	0.01	0.06
	Flare 11 (Unit 7 SSM	NO_x	0.01	0.01
	Emissions from Flare 11) (6)	CO	0.06	0.01
		VOC	0.19	0.01
	Flare 11 (Unit 17 SSM	NO_x	0.01	0.01
	Emissions from Flare 11) (6)	CO	0.05	0.01
		VOC	0.15	0.01
	Flare 11 (Unit 35 SSM	NO_x	0.03	0.01
	Emissions from Flare 11) (6)	CO	0.21	0.02
		VOC	0.65	0.07
56-61-16	Flare 16	NO_x	0.83	3.64
		CO 1.89	8.30	
		VOC (5)	4.57	20.02
		SO_2 4.29	18.78	
		Ethylene	0.01	0.02
		Propylene	0.53	2.32
	Flare 16 (Unit 7 SSM	NO_x	0.02	0.01
	Emissions from Flare 16) (6)	CO	0.05	0.01
		VOC	0.19	0.01
	Flare 16 (Unit 17 SSM	NO_x	0.02	0.01
	Emissions from Flare 16) (6)	CO	0.04	0.01
	VOC	0.15	0.01	
	Flare 16 (Unit 35 SSM	NO_x	0.08	0.01
	Emissions from Flare 16) (6)	CO	0.17	0.02

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**
		VOC	0.65	0.07
68-95-66	Sour Naphtha Storage Tank	VOC	1.14	3.81
68-95-74	Sour Naphtha Storage Tank	VOC	1.20	4.05
68-95-75	Sour Naphtha Storage Tank	VOC	1.09	3.63
68-95-76	Sour Naphtha Storage Tank	VOC	1.06	3.50
68-95-85	Benzene/Toluene Storage Tank	VOC	0.17	0.64
68-95-86	Benzene Storage Tank	VOC	0.29	0.48
68-95-87	Benzene Storage Tank	VOC	0.29	0.44
68-95-92	Benzene Storage Tank	VOC	0.18	0.49
68-95-93	Benzene Storage Tank	VOC	0.20	0.55
68-95-205	Heavy Aromatics Storage Tank	VOC	0.78	1.92
68-95-206	Hydrotreated Naphtha Tank	VOC	1.90	6.79
68-95-210	Raffinate Storage Tank	VOC	3.66	13.13
68-95-216	Toluene Storage Tank	VOC	0.66	0.80
68-95-409	Xylene Storage Tank	VOC	0.14	0.28
68-95-410	Unit 7 Extractor Charge Tank	VOC	0.75	2.35
68-95-411	Unit 7 Extract Storage Tank	VOC	0.31	0.59
68-95-413	Xylene Storage Tank	VOC	0.14	0.27
7-SSM-0	Unit 7 SSM Emissions (6)	VOC	1.83	0.05

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
17-SSM-0	Unit 17 SSM Emissions (6)	VOC	1.30	0.04
35-SSM-0	Unit 35 SSM Emissions (6)	VOC	24.06	1.35

(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
SO_2 - sulfur dioxide
PM_{10} - particulate matter equal to or less than 10 microns in diameter.
CO - carbon monoxide
HCl - hydrogen chloride
Cl_2 - chlorine
SSM - start-up, shutdown & maintenance
(4) Emission rate is an estimate and compliance is demonstrated by meeting the requirements of the applicable special conditions and permit application representations.
(5) Ethylene and propylene emissions are included in the total VOC.
(6) These SSM emissions shall not occur simultaneously at Units 7, 17, and 35.

* 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.

Dated February 12, 2007