EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 22100

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**
S-34	North Boiler		PM_{10}	0.21	0.93
		VOC	0.15	0.67	
		NO_x	2.79	12.20	
		CO	2.34	10.25	
		SO_2	0.01	0.04	
S-35	South Boiler		PM_{10}	0.25	1.08
		VOC	0.18	0.78	
		NO_x	3.23	14.15	
		CO	2.71	11.89	
		SO_2	0.01	0.05	
S-6A	North Sulfur Heater A		PM_{10}	0.05	0.22
		VOC	0.037	0.16	
		NO_x	0.70	2.93	
		CO	0.56	2.46	
		SO_2	<0.01	0.01	
S-6B	North Sulfur Heater B		PM_{10}	0.05	0.22
		VOC	0.04	0.16	
		NO_x	0.70	2.93	
		CO	0.56	2.46	
		SO_2	<0.01	0.01	
S-5A	North Methane Heater A		PM	<0.01	0.04
		VOC	<0.01	0.03	
		NO_x	0.11	0.49	
		CO	0.09	0.41	
		SO_2	<0.01	<0.01	

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AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
S-5B	North Methane Heater B	PM	<0.01	0.04
		VOC	<0.01	0.03
		NO_x	0.11	0.49
		CO	0.09	0.41
		SO_2	<0.01	<0.01
S-14	Unit 196 Reactor Heater	PM	0.01	0.04
		VOC	<0.01	0.03
		NO_x	0.11	0.49
		CO	0.09	0.41
		SO_2	<0.01	<0.01
S-15	196 Unit Driers Regen Heater	PM	0.01	0.02
		VOC	<0.01	0.02
		NO_x	0.07	0.29
		CO	0.06	0.25
		SO_2	<0.01	<0.01
S-37	Unit 196 Hot Oil Heater	PM	0.04	0.17
		VOC	0.03	0.12
		NO_x	0.50	2.20
		CO	0.42	1.85
		SO_2	<0.01	0.01
S-38	Unit 197 Hot Oil Heater	PM	0.07	0.30
		VOC	1.46	1.46
		NO_x	0.89	3.90
		CO	0.75	3.28
		SO_2	1.13	0.06
T-105	Tank T-9770	VOC	3.96	0.67
T-6	Tank T-9606	VOC	3.96	0.67
T-35	Tank T-9635	VOC	3.96	1.03
T-41	Tank T-9641	VOC	3.96	0.90
T-77	Tank V-8077	H_2S	<0.01	<0.01

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates * lb/hr	TPY**
		SO_2 0.17	0.13	
T-78	Tank V-8078	H_2S	<0.01	<0.01
		SO_2 0.17	0.13	
V-8001	Sulfur Pit	H_2S	0.10	0.45
		SO_2 2.58	11.29	
T-94	Tank T-9094	VOC	2.89	0.74
T-5	Tank T-9705	VOC	0.20	0.01
TX-9280	Tank TX-9280	VOC	0.05	<0.01
P-FLR	Plant Flare	VOC	12.7	20.56
		SO_2 600.00	935.50	
		NO_x 1.11	2.57	
		CO 4.79	11.08	
S-17	Thermal Oxidizer	PM	2.00	8.76
		HCl 0.10	0.44	
		SO_2 567.91	603.60	
		NO_x 1.32	5.80	
		CO 73.30	109.90	
		VOC 0.32	1.40	
		CH_3SH	<0.01	0.04
		CS_2/TRS	0.34	0.36
F-80	180 Unit Fugitives (4)	VOC	0.46	2.01
		H_2S 0.19	0.84	
F-96	196 Unit Fugitives (4)	VOC	0.27	1.20
		H_2S 0.15	0.66	
F-97	197 Unit Fugitives (4)	VOC	0.36	1.57
		H_2S 0.19	0.85	

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**
P-93	293 Unit Fugitives (4)		VOC	0.16	0.69
		H_2S	0.36	1.58	
F-HZWST	Haz. Storage/Handling		VOC	0.18	0.78
		H_2S	<0.01	<0.01	
EAST CT	East Cooling Tower		VOC	0.16	0.26
F-WST-WTR	Wastewater		VOC	0.22	0.82
S-PYRO	Pyrolysis Furnace		PM	0.01	0.01
		NO_x	0.03	0.03	
		VOC	0.02	0.02	
		SO_2	<0.01	<0.01	
		CO	0.05	0.05	
T-9662	Tank 9662		VOC	2.89	0.74
WESTCT	West Cooling Tower		VOC	0.40	0.90
		H_2S	0.40	0.90	
WESTCT2	West Cooling Tower 2		VOC	0.11	0.25
		H_2S	0.11	0.25	

(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 - 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 particulate matter greater than 10 microns is emitted.
CO - carbon monoxide
HCl - hydrogen chloride
H_2S - hydrogen sulfide
CS_2/TRS - carbon disulfide/total reduced sulfur
CH_3SH - mercaptan
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

* 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 August 6, 2002