

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 2303A

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
E-01-843	H-101 Charge Heater	PM	0.85	3.72
		SO <sub>2</sub>	2.29	10.04
		NO <sub>x</sub>	13.60	59.57
		CO	6.80	29.78
		VOC	0.24	1.04
E-02-843	H-102 Charge Heater	PM	0.85	3.72
		SO <sub>2</sub>	2.29	10.04
		NO <sub>x</sub>	13.60	59.57
		CO	6.80	29.78
		VOC	0.24	1.04
E-03-843	H-103 Charge Heater	PM	0.85	3.72
		SO <sub>2</sub>	2.29	10.04
		NO <sub>x</sub>	13.60	59.57
		CO	6.80	29.78
		VOC	0.24	1.04
E-06-843	Eight Tank Heaters for Charge Tanks 0.63	PM		0.14
		SO <sub>2</sub>	0.16	0.71
		NO <sub>x</sub>	2.40	10.51
		CO	0.24	1.05
		VOC	0.07	0.31
E-01-942	H-1, H-2, and H-3 Heaters	PM	2.04	8.95
		SO <sub>2</sub>	1.97	8.63
		NO <sub>x</sub>	11.68	51.16
		CO	8.91	39.01
		VOC	1.53	1.17

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			<u>lb/hr</u>	<u>TPY</u>
E-03-SCOT	SCOT III Incinerator SRU 545	PM	0.15	0.66
		SO <sub>2</sub>	88.41	387.21
		NO <sub>x</sub>	2.40	10.51
		CO	6.70	29.35
		VOC	0.08	0.37
		H <sub>2</sub> S	0.05	0.22
F-843	DCU 843 VOC Fugitives (4)	VOC	6.16	26.97
F-843-PM	DCU 843 PM Fugitives (4)	PM	2.41	10.56
F-942	HCU 942 Fugitives (4)	VOC	7.17	31.39
F-545	SRU 545 VOC Fugitives (4)	VOC	1.13	5.00
F-LOADING	Sulfur Loading Fugitives (4)	H <sub>2</sub> S	0.15	0.16
F-545-H2S	SRU 545 H2S Fugitives (4)	H <sub>2</sub> S	<0.01	0.02
T-8431	Charge Tank 1	VOC	0.46	2.06
T-8432	Charge Tank 2	VOC	0.46	2.06
E-23-FLARE	Flare 23	SO <sub>2</sub>	0.01	0.04
		NO <sub>x</sub>	0.06	0.26
		CO	2.10	9.21
		VOC	0.03	0.14
E-191CT	Cooling Tower 191	VOC	0.30	1.50
F-PIPING	Piping Fugitives (4)	VOC	3.55	15.56
5023	Tank 106	Crude Oil	7.30	12.8
		H <sub>2</sub> S	0.02	0.04

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			lb/hr	TPY
5024	Tank 107	Crude Oil	7.30	12.8
		H <sub>2</sub> S	0.02	0.04
5025	Tank 108	Crude Oil	7.30	12.8
		H <sub>2</sub> S	0.02	0.04
5026	Tank 109	Crude Oil	7.30	12.8
		H <sub>2</sub> S	0.02	0.04
Fugitive	Fugitives (4)	Crude Oil	0.70	3.1
F-843-1	Coke Drum to Pit	PM	<0.01	<0.01
F-843-3	Coke Pit to Coke Pad	PM	<0.01	<0.01
F-843-4A	Coke Drum to Hopper	PM	0.04	0.10
F-843-4	Coke Feeder/Breaker	PM	0.10	0.25
F-843-4B	Coke Drop to CO-1	PM	0.04	0.10
F-843-5	Coke CO-1 to CO-2	PM	0.04	0.10
F-843-6	Coke CO-2 to ST-1	PM	0.04	0.10
F-843-7	Coke ST-1 to Stockpile	PM	0.08	0.21
F-843-9A	Coke CO-3c to Hopper	PM	0.25	0.10
F-843-9	Coke CO-3a to CO-4	PM	0.25	0.10
F-843-9B	Coke Truck/Railcar Loading	PM	0.25	0.10
F-843-10	Coke CO-3b to CO-4	PM	0.25	0.10
F-843-11	Coke CO-4 to CO-5	PM	0.25	0.10

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY
F-843-12	Coke CO-4 to Shiploader 1	PM	0.25	0.10
F-843-13	Coke CO-5 to Shiploader 2	PM	0.25	0.10
F-843-14	Coke Shiploader 1 to Ship	PM	0.25	0.10
F-843-15	Coke Shiploader 2 to Ship	PM	0.25	0.10
F-843-2	Coke Pit/Pad	PM	0.01	0.05
F-843-8	Coke Active Stockpile	PM	0.38	1.66
F-843-16	Coke Conveyor to Pile	PM	0.06	0.15
F-843-17	Coke Conveyor to Ship	PM	0.57	0.23

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in 30 TAC Section 101.1  
 NO<sub>x</sub> - total oxides of nitrogen  
 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.  
 CO - carbon monoxide  
 H<sub>2</sub>S - hydrogen sulfide  
 Crude Oil - crude oils with a vapor pressure less than 11 psia
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

\* 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

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	<u>Emission Rates *</u>	
			<u>lb/hr</u>	<u>TPY</u>

Dated \_\_\_\_\_