

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 36845

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. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
02CHRGHTR	Crude A Heater	See Heater Caps	--	--
02CHRGHTR	Crude B Heater	See Heater Caps	--	--
02CHRGDHTR	Crude D Heater	See Heater Caps	--	--
02BGVCMHTR	Big Vacuum Heater	See Heater Caps	--	--
09CHRGHTR	LDH Charge Heater	See Heater Caps	--	--
23AC-1HTR	PDA Asphalt Heater	See Heater Caps	--	--
23GSOILHTR	PDA Gas Oil Heater	See Heater Caps	--	--
23KTTLEHTR	PDA Tea Kettle Superheater	See Heater Caps	--	--
15CHRGHTR	Gas Hydrotreater Charge Heater	See Heater Caps	--	--
26C8WSTHTR	C-8 Column West Heater	See Heater Caps	--	--
26C8ESTHTR	C-8 Column East Heater	See Heater Caps	--	--
Heaters Emission Caps		PM	4.02	16.56
		PM <sub>10</sub>	4.02	16.56
		PM <sub>2.5</sub>	4.02	16.56
		VOC	1.98	8.03
		NO <sub>x</sub>	22.20	90.92
		CO	19.42	80.67
		SO <sub>2</sub>	12.47	14.95
02CTR14FUG	Crude Cooling Tower	VOC	0.31	1.34
		PM	0.13	0.56
		PM <sub>10</sub>	0.01	0.06
		PM <sub>2.5</sub>	<0.01	<0.01

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06CTR3FUG	FCCU Cooling Tower No. 3	VOC	0.36	1.56
		PM	0.65	2.83
		PM <sub>10</sub>	0.10	0.43
		PM <sub>2.5</sub>	<0.01	<0.01
80CTR13FUG	DHT Cooling Tower	VOC	0.15	0.67
		PM	0.10	0.43
		PM <sub>10</sub>	0.01	0.05
		PM <sub>2.5</sub>	<0.01	<0.01
09CTR7FUG	LDH No. 7 Cooling Tower	VOC	0.13	0.59
		PM	0.71	3.10
		PM <sub>10</sub>	0.01	0.04
		PM <sub>2.5</sub>	<0.01	<0.01
37CRUDECAP	Tank No. 1011	VOC (6)	4.18	8.90
	Tank No. TP05	VOC (6)	3.53	
37TANK0351	Tank No. 351	VOC	0.30	0.72
37TANK0350	Tank No. 350	VOC	1.70	3.95
37TANK0353	Tank No. 353	VOC	1.63	3.90
37GRACECAP	Tank No. 2044	VOC (6)	3.08	1.53
	Tank No. 2045	VOC (6)	3.00	
37MDISTCAP	Tank No. 156	VOC (6)	1.11	10.37
	Tank No. 109	VOC (6)	0.85	
	Tank No. 126	VOC (6)	4.34	
	Tank No. 322	VOC (6)	3.27	
	Tank No. 327	VOC (6)	3.26	
	Tank No. 3132	VOC (6)	3.97	

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37HVDISTCAP	Tank No. 178	VOC (6)	0.36	0.66
	Tank No. 181	VOC (6)	0.36	
	Tank No. 182	VOC (6)	0.36	
	Tank No. 180	VOC (6)	0.36	
37TANK0183	Tank No. 183	VOC	4.93	12.23
01TANK0130	Tank No.130	VOC	0.07	0.06
37TANK2002	Tank No. 2002	VOC	5.83	12.10
37LTDISTCAP	Tank No. 123	VOC (6)	1.84	64.23
	Tank No. 128	VOC (6)	6.75	
	Tank No. 122	VOC (6)	1.28	
	Tank No. 125	VOC (6)	4.30	
	Tank No. 184	VOC (6)	4.64	
	Tank No. 185	VOC (6)	4.51	
	Tank No. 3131	VOC (6)	4.16	
02CRUDEFUG	Crude Complex Fugitives (5)	VOC	8.65	37.93
		H <sub>2</sub> S	0.02	0.06
10FGTFUG	Fuel Gas Treater Fugitives (5)	VOC	0.98	4.29
		H <sub>2</sub> S	0.07	0.30
09LDHFUG	LDH Fugitives (5)	VOC	0.56	2.45
		H <sub>2</sub> S	0.04	0.19
23PDAFUG	PDA Fugitives (5)	VOC	3.04	13.16
		H <sub>2</sub> S	0.04	0.19
15GOHFUG	Gas Oil Hydrotreater Fugitives (5)	VOC	0.86	3.69
		H <sub>2</sub> S	0.07	0.28
26RFMTEFUG	Reformate Splitter/C8 Column Fugitives (5)	VOC	0.65	2.74
24STM24BLR	24 Boiler	VOC	1.35	5.31
		SO <sub>2</sub>	6.00	7.34
		H <sub>2</sub> S	0.03	0.04

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		NO <sub>x</sub>	3.74	14.76
		CO	8.82	34.78
		NH <sub>3</sub>	1.05	4.23
		PM	1.86	7.36
		PM <sub>10</sub>	1.86	7.36
		PM <sub>2.5</sub>	1.86	7.36
24STM24MSS	24 Boiler (MSS)	NO <sub>x</sub>	24.90	-
		CO	88.01	-
24BOILFUG	24 Boiler Fugitives	VOC	0.06	0.25
		NH <sub>3</sub>	0.01	0.04

- (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 Title 30 Texas Administrative Code § 101.1  
 NO<sub>x</sub> - total oxides of nitrogen  
 SO<sub>2</sub> - sulfur dioxide  
 PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented  
 PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented  
 PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter  
 CO - carbon monoxide  
 H<sub>2</sub>S - hydrogen sulfide
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) Annual emission rate serves as a combined emission rate for all storage tanks listed with the emission point number (EPN). Short-term emission rates apply to individual tanks for storage tanks listed with EPN.

Date: March 15, 2022