

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 51A

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)
04CHRGHTR	Naphtha HDS Charge Heater	SO <sub>2</sub>	0.63	0.63
		H <sub>2</sub> S	0.01	<0.01
		VOC	0.12	0.53
		PM	0.16	0.70
		PM <sub>10</sub>	0.16	0.70
		PM <sub>2.5</sub>	0.16	0.70
		NO <sub>x</sub>	2.09	9.15
		CO	1.37	6.61
04DEC5HTR	Naphtha HDS Depentanizer Reboiler	SO <sub>2</sub>	2.29	2.28
		H <sub>2</sub> S	0.02	<0.01
		VOC	0.42	1.84
		PM	0.59	2.58
		PM <sub>10</sub>	0.59	2.58
		PM <sub>2.5</sub>	0.59	2.58
		NO <sub>x</sub>	2.73	11.96
		CO	5.66	22.56
05DEC5HTR	Reformer Depentanizer Reboiler	SO <sub>2</sub>	1.70	1.69
		H <sub>2</sub> S	0.01	<0.01
		VOC	0.31	1.36
		PM	0.44	1.93
		PM <sub>10</sub>	0.44	1.93
		PM <sub>2.5</sub>	0.44	1.93
		NO <sub>x</sub>	2.03	8.89
		CO	4.09	8.98

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05REFMRFLR	Reformer Flare	SO <sub>2</sub>	0.55	0.22
		H <sub>2</sub> S	<0.01	<0.01
		VOC	0.10	0.17
		NO <sub>x</sub>	1.78	2.97
		CO	0.76	1.26
05REFRMFUG	HDS & Reformer Fugitives (4)	VOC	4.14	18.14
		H <sub>2</sub> S	<0.01	0.04
37TANKTP07	Tank TP07	VOC	5.49	9.47
37TANK0326	Tank 326	VOC	0.29	0.57
05RFHTRCAP	Reformer Heater Cap (6)	SO <sub>2</sub>	10.36	11.35
		H <sub>2</sub> S	0.05	0.04
		VOC	1.90	8.36
		PM	2.64	11.55
		PM <sub>10</sub>	2.64	11.55
		PM <sub>2.5</sub>	2.64	11.55
		NO <sub>x</sub>	14.15	62.00
		CO	12.50	54.78

- (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) Reformer Heater Cap includes Reformer Charge Heater FINs 05CHRGHTR, 05REHT1HTR, 05REHT2HTR, and 05REHT3HTR.

Date: March 27, 2020