

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 32769 and PSDTX1258M2

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)
S-400M1	Storage Tank S-400M1	VOC	21.01	24.56
		H <sub>2</sub> S	0.06	0.07
S-400M2	Storage Tank S-400M2	VOC	21.01	24.56
		H <sub>2</sub> S	0.06	0.07
S-400M3	Storage Tank S-400M3	VOC	21.01	24.56
		H <sub>2</sub> S	0.06	0.07
S-400M4	Storage Tank S-400M4	VOC	21.01	24.56
		H <sub>2</sub> S	0.06	0.07
S-400M5	Storage Tank S-400M5	VOC	21.55	24.37
		H <sub>2</sub> S	0.06	0.07
S-400M6	Storage Tank S-400M6	VOC	21.55	24.37
		H <sub>2</sub> S	0.06	0.07
S-400M7	Storage Tank S-400M7	VOC	21.55	24.37
		H <sub>2</sub> S	0.06	0.07
S-400M8	Storage Tank S-400M8	VOC	21.55	24.37
		H <sub>2</sub> S	0.06	0.07
S-400M9	Storage Tank S-400M9	VOC	21.55	24.37
		H <sub>2</sub> S	0.06	0.07
S-200M1	Storage Tank S-200M1	VOC	28.61	18.57
		H <sub>2</sub> S	0.09	0.06

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S-200M2	Storage Tank S-200M2	VOC	28.61	18.57
		H <sub>2</sub> S	0.09	0.06
S-200M3	Storage Tank S-200M3	VOC	28.61	18.57
		H <sub>2</sub> S	0.09	0.06
S-200M4	Storage Tank S-200M4	VOC	28.61	18.57
		H <sub>2</sub> S	0.09	0.06
S-200M5	Storage Tank S-200M5	VOC	28.61	18.57
		H <sub>2</sub> S	0.09	0.06
S-200M6	Storage Tank S-200M6	VOC	28.61	18.57
		H <sub>2</sub> S	0.09	0.06
S-200M7	Storage Tank S-200M7	VOC	25.73	17.88
		H <sub>2</sub> S	0.08	0.05
S-200M8	Storage Tank S-200M8	VOC	25.73	17.88
		H <sub>2</sub> S	0.08	0.05
S-200M9	Storage Tank S-200M9	VOC	25.73	17.88
		H <sub>2</sub> S	0.08	0.05
S-201	Storage Tank 201	VOC	1.80	---
S-202	Storage Tank 202	VOC	1.43	---
S-203	Storage Tank 203	VOC	0.64	---
S-204	Storage Tank 204	VOC	1.91	---
S-205	Storage Tank 205	VOC	0.86	---
S-206	Storage Tank 206	VOC	1.57	---
S-207	Storage Tank 207	VOC	2.08	---
Storage Tanks S-201 through S-207 annual emission CAP		VOC	---	15.40
F-1 F-2	Fugitive Components (5)	VOC	2.77	12.12
		H <sub>2</sub> S	0.02	0.03

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F-16	Fugitive Components (5)	VOC	0.80	3.50
		H <sub>2</sub> S	<0.01	<0.01
F-17	Fugitive Components (5)	VOC	1.83	8.03
		H <sub>2</sub> S	0.01	0.02
F-400	Fugitive Components (5)	VOC	1.94	8.48
		H <sub>2</sub> S	0.01	0.03
F-200	Fugitive Components (5)	VOC	0.22	0.97
		H <sub>2</sub> S	<0.01	<0.01
B-1	Oil Dock 1	VOC	142.15	336.43
		H <sub>2</sub> S	0.47	1.12
B-2A (6)	Oil Dock 2 (Refined Products)	VOC	178.45	25.51
		H <sub>2</sub> S	—	—
B-16	NuStar Dock 16	VOC	142.15	201.86
		H <sub>2</sub> S	0.47	0.67
B-17	NuStar Dock 17	VOC	284.30	235.50
		H <sub>2</sub> S	0.95	0.78
B-1, B-2A, B-16 and B-17 Combined Annual Emission Cap (7)		VOC	—	336.43
		H <sub>2</sub> S	—	1.12
VCU-2	VCU-2 (Refined products from Oil Dock 2 Loading Arm B-2A)	VOC	67.81	9.05
		NO <sub>x</sub>	9.43	1.55
		CO	18.82	3.08
		PM	0.51	0.07
		PM <sub>2.5</sub>	0.51	0.07
		PM <sub>10</sub>	0.51	0.07

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VCU-2	VCU-2 (Oil Dock 2- Crude/Condensate from Oil Dock 2 Loading Arm B-2B)	VOC	28.43	38.14
		NO <sub>x</sub>	8.64	18.93
		CO	17.25	37.79
		SO <sub>2</sub>	16.50	21.39
		PM	0.47	1.02
		PM <sub>2.5</sub>	0.47	1.02
		PM <sub>10</sub>	0.47	1.02
		H <sub>2</sub> S	0.09	0.12
VCU-2	Vapor Combustor No. 2	VOC	27.44	64.10
		NO <sub>x</sub>	11.01	23.98
		CO	21.98	47.88
		SO <sub>2</sub>	16.65	39.38
		PM	0.59	1.29
		PM <sub>2.5</sub>	0.59	1.29
		PM <sub>10</sub>	0.59	1.29
		H <sub>2</sub> S	0.09	0.21
VCU-3	Vapor Combustor No. 3	VOC	27.51	64.10
		NO <sub>x</sub>	12.72	23.98
		CO	25.39	47.88
		SO <sub>2</sub>	16.65	39.38
		PM	0.69	1.29
		PM <sub>2.5</sub>	0.69	1.29
		PM <sub>10</sub>	0.69	1.29
		H <sub>2</sub> S	0.09	0.21

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VCU-4	Vapor Combustor No. 4	VOC	34.45	52.57
		NO <sub>x</sub>	8.63	33.94
		CO	17.23	67.77
		SO <sub>2</sub>	16.48	40.39
		PM	0.47	1.83
		PM <sub>2.5</sub>	0.47	1.83
		PM <sub>10</sub>	0.47	1.83
		H <sub>2</sub> S	0.09	0.17
VCU-6	Vapor Combustor No. 6	VOC	29.11	—
		NO <sub>x</sub>	17.35	—
		CO	34.63	—
		SO <sub>2</sub>	33.15	—
		PM	0.94	—
		PM <sub>2.5</sub>	0.94	—
		PM <sub>10</sub>	0.94	—
		H <sub>2</sub> S	0.05	—
VCU-7	Vapor Combustor No. 7	VOC	29.11	—
		NO <sub>x</sub>	17.35	—
		CO	34.63	—
		SO <sub>2</sub>	33.15	—
		PM	0.94	—
		PM <sub>2.5</sub>	0.94	—
		PM <sub>10</sub>	0.94	—
		H <sub>2</sub> S	0.05	—

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VCU-6 and VCU-7 Combined Annual Cap		VOC	—	45.60
		NO <sub>x</sub>	—	37.48
		CO	—	74.83
		SO <sub>2</sub>	—	30.13
		PM	—	2.02
		PM <sub>2.5</sub>	—	2.02
		PM <sub>10</sub>	—	2.02
		H <sub>2</sub> S	—	0.15
VCU-5	Back-up Vapor Combustor No. 5 (Back-up for VCU-2 and VCU-3) (8)(9)	VOC	27.51	64.10
		NO <sub>x</sub>	12.72	23.98
		CO	25.39	47.88
		SO <sub>2</sub>	16.65	39.38
		PM	0.69	1.29
		PM <sub>2.5</sub>	0.69	1.29
		PM <sub>10</sub>	0.69	1.29
		H <sub>2</sub> S	0.09	0.21
VCU-2, 3, 4, 5, 6 and 7 Combined Annual Cap (10)		VOC	—	64.10
		NO <sub>x</sub>	—	37.48
		CO	—	74.83
		SO <sub>2</sub>	—	40.39
		PM	—	2.02
		PM <sub>2.5</sub>	—	2.02
		PM <sub>10</sub>	—	2.02
		H <sub>2</sub> S	—	0.21
MSS	Controlled Tank Roof Landing MSS Emissions (11)	VOC	86.91	0.24
		NO <sub>x</sub>	12.06	0.63

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		CO	24.08	1.25
		SO <sub>2</sub>	0.05	<0.01
		PM	3.36	0.17
		PM <sub>2.5</sub>	3.36	0.17
		PM <sub>10</sub>	3.36	0.17

- (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  
 CO - carbon monoxide  
 H<sub>2</sub>S - hydrogen sulfide  
 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  
 PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
- (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) Maximum hourly emissions are limited to the maximum hourly emissions authorized for each loading arm (B-2A and B-2B) for EPN VCU-3.
- (7) Cap applies to total emissions for the following EPNs: B-1, B-2, B-16 and B-17
- (8) Maximum hourly emissions are limited to the maximum hourly emissions authorized for each loading arm for EPNs VCU-2 and VCU-3.
- (9) Annual Emissions are a subcap of VCU-2 and VCU-3.
- (10) Cap applies to total emissions for the following EPNs: VCU-2, 3, 4, 5, 6 and 7.
- (11) Applies to EPNs: S-400M5, S-400M6, S-400M7, S-400M8, S-400M9, S-200M4, S-200M5 and S-200M6. Total emissions include the products of combustion of controlled MSS activities plus pilot/assist gas emissions; tank MSS will not occur simultaneously for more than one tank.

Date: DATE