

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 118901 and PSDTX1408

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)
T-2000	Tank T-2000 (6)	VOC	13.82	-
		H <sub>2</sub> S	< 0.01	-
T-2001	Tank T-2001 (6)	VOC	13.82	-
		H <sub>2</sub> S	< 0.01	-
T-2002	Tank T-2002 (6)	VOC	24.53	-
		H <sub>2</sub> S	< 0.01	-
T-2100	Tank T-2100 (6)	VOC	13.82	-
		H <sub>2</sub> S	< 0.01	-
T-2101	Tank T-2101 (6)	VOC	13.82	-
		H <sub>2</sub> S	< 0.01	-
T-2102	Tank T-2102 (6)	VOC	13.82	-
		H <sub>2</sub> S	< 0.01	-
T-2209	Tank T-2209 (6)	VOC	14.18	-
		H <sub>2</sub> S	< 0.01	-
T-2210	Tank T-2210 (6)	VOC	11.78	-
		H <sub>2</sub> S	< 0.01	-
T-2211	Tank T-2211 (6)	VOC	11.78	-
		H <sub>2</sub> S	< 0.01	-
T-2212	Tank T-2212 (6)	VOC	11.78	-
		H <sub>2</sub> S	< 0.01	-
T-2300	Tank T-2300 (6)	VOC	9.02	-
		H <sub>2</sub> S	< 0.01	-
T-2301	Tank T-2301 (6)	VOC	9.72	-
		H <sub>2</sub> S	< 0.01	-

Emission Sources - Maximum Allowable Emission Rates

T-2302	Tank T-2302 (6)	VOC	13.20	-
		H <sub>2</sub> S	< 0.01	-
T-2303	Tank T-2303 (6)	VOC	13.20	-
		H <sub>2</sub> S	< 0.01	-
T-2304	Tank T-2304 (6)	VOC	12.16	-
		H <sub>2</sub> S	< 0.01	-
T-33400	Tank T-33400 (6)	VOC	13.57	-
		H <sub>2</sub> S	< 0.01	-
T-33500	Tank T-33500 (6)	VOC	13.57	-
		H <sub>2</sub> S	< 0.01	-
T-2305	Tank T-2305 (6)	VOC	9.95	-
		H <sub>2</sub> S	< 0.01	-
T-2306	Tank T-2306 (6)	VOC	9.95	-
		H <sub>2</sub> S	< 0.01	-
T-2307	Tank T-2307 (6)	VOC	9.95	-
		H <sub>2</sub> S	< 0.01	-
T-2401	Tank T-2401 (6)	VOC	9.95	-
		H <sub>2</sub> S	< 0.01	-
T-2402	Tank T-2402 (6)	VOC	12.16	-
		H <sub>2</sub> S	< 0.01	-
T-2103	Tank T-2103 (6)	VOC	13.58	-
		H <sub>2</sub> S	< 0.01	-
T-2104	Tank T-2104 (6)	VOC	13.58	-
		H <sub>2</sub> S	< 0.01	-
T-2105	Tank T-2105 (6)	VOC	13.58	-
		H <sub>2</sub> S	< 0.01	-
T-2106	Tank T-2106 (6)	VOC	13.58	-
		H <sub>2</sub> S	< 0.01	-
T-2213	Tank T-2213 (6)	VOC	12.31	-

Emission Sources - Maximum Allowable Emission Rates

		H <sub>2</sub> S	< 0.01	-
T-2214	Tank T-2214 (6)	VOC	12.31	-
		H <sub>2</sub> S	< 0.01	-
TKCAP	TANK CAP	VOC	-	107.03
		H <sub>2</sub> S	-	0.02
FXHO1	Hot Oil Tank 1	VOC	<0.01	<0.01
T-COMB-1	Temporary Combustion Unit 1 (7)	VOC	2.00	-
		NO <sub>x</sub>	3.00	-
		CO	4.00	-
		H <sub>2</sub> S	0.01	-
		SO <sub>2</sub>	1.21	-
		PM	0.15	-
		PM <sub>10</sub>	0.15	-
		PM <sub>2.5</sub>	0.15	-
T-COMB-2	Temporary Combustion Unit 2 (7)	VOC	2.00	-
		NO <sub>x</sub>	3.00	-
		CO	4.00	-
		H <sub>2</sub> S	0.01	-
		SO <sub>2</sub>	1.21	-
		PM	0.15	-
		PM <sub>10</sub>	0.15	-
		PM <sub>2.5</sub>	0.15	-

Emission Sources - Maximum Allowable Emission Rates

T-COMB-3	Temporary Combustion Unit 3 (7)	VOC	2.00	-
		NO <sub>x</sub>	3.00	-
		CO	4.00	-
		H <sub>2</sub> S	0.01	-
		SO <sub>2</sub>	1.21	-
		PM	0.15	-
		PM <sub>10</sub>	0.15	-
		PM <sub>2.5</sub>	0.15	-
T-COMB-4	Temporary Combustion Unit 4 (7)	VOC	2.00	-
		NO <sub>x</sub>	3.00	-
		CO	4.00	-
		H <sub>2</sub> S	0.01	-
		SO <sub>2</sub>	1.21	-
		PM	0.15	-
		PM <sub>10</sub>	0.15	-
		PM <sub>2.5</sub>	0.15	-
T-COMB-5	Temporary Combustion Unit 5 (7)	VOC	2.00	-
		NO <sub>x</sub>	3.00	-
		CO	4.00	-
		H <sub>2</sub> S	0.01	-
		SO <sub>2</sub>	1.21	-
		PM	0.15	-
		PM <sub>10</sub>	0.15	-
		PM <sub>2.5</sub>	0.15	-

Emission Sources - Maximum Allowable Emission Rates

T-COMB CAP	Temporary Combustion Unit Cap	VOC	-	3.26
		NO <sub>x</sub>	-	31.14
		CO	-	41.52
		H <sub>2</sub> S	-	0.01
		SO <sub>2</sub>	-	1.48
		PM	-	1.55
		PM <sub>10</sub>	-	1.55
		PM <sub>2.5</sub>	-	1.55
RTLANDFUG	Routine Tank Landings	VOC	230.0	2.36
		H <sub>2</sub> S	< 0.01	< 0.01
TRKFUG	Truck Loading Fugitives	VOC	2.66	0.39
RAILFUG	Railcar Loading Fugitives	VOC	21.15	-
		H <sub>2</sub> S	< 0.01	-
DOCKFUG	Dock Loading Fugitives	VOC	132.19	-
		H <sub>2</sub> S	< 0.01	-
RAILFUG & DOCKFUG	Loading Emissions Cap	VOC	-	38.14
		H <sub>2</sub> S	-	0.01
TRKFLR	Controlled Truck Loading VCU	VOC	1.68	0.08
		NO <sub>x</sub>	4.80	2.29
		CO	12.01	5.42
		SO <sub>2</sub>	0.01	<0.01
		PM	0.13	0.04
		PM <sub>10</sub>	0.13	0.04
		PM <sub>2.5</sub>	0.13	0.04

Emission Sources - Maximum Allowable Emission Rates

MVCU-1	Controlled Marine Loading VCU No. 1 (8)	VOC	14.40	-
		NO <sub>x</sub>	21.60	-
		CO	39.67	-
		H <sub>2</sub> S	0.05	-
		SO <sub>2</sub>	8.74	-
		PM	1.07	-
		PM <sub>10</sub>	1.07	-
		PM <sub>2.5</sub>	1.07	-
MVCU-2	Controlled Marine Loading VCU No. 2 (8)	VOC	14.40	-
		NO <sub>x</sub>	21.60	-
		CO	39.67	-
		H <sub>2</sub> S	0.05	-
		SO <sub>2</sub>	8.74	-
		PM	1.07	-
		PM <sub>10</sub>	1.07	-
		PM <sub>2.5</sub>	1.07	-
MVCU-3	Controlled Marine Loading VCU No. 3 (8)	VOC	14.40	-
		NO <sub>x</sub>	21.60	-
		CO	39.67	-
		H <sub>2</sub> S	0.05	-
		SO <sub>2</sub>	8.74	-
		PM	1.07	-
		PM <sub>10</sub>	1.07	-
		PM <sub>2.5</sub>	1.07	-

Emission Sources - Maximum Allowable Emission Rates

MVCU-4	Controlled Marine Loading VCU No. 4 (8)	VOC	14.40	-
		NO <sub>x</sub>	21.60	-
		CO	39.67	-
		H <sub>2</sub> S	0.05	-
		SO <sub>2</sub>	8.74	-
		PM	1.07	-
		PM <sub>10</sub>	1.07	-
		PM <sub>2.5</sub>	1.07	-
MVCU-5	Controlled Marine Loading VCU No. 5 (8)	VOC	14.40	-
		NO <sub>x</sub>	21.60	-
		CO	39.67	-
		H <sub>2</sub> S	0.05	-
		SO <sub>2</sub>	8.74	-
		PM	1.07	-
		PM <sub>10</sub>	1.07	-
		PM <sub>2.5</sub>	1.07	-
RAILVCU	Controlled Railcar Loading VCU (8)	VOC	14.40	-
		NO <sub>x</sub>	21.60	-
		CO	39.67	-
		H <sub>2</sub> S	0.05	-
		SO <sub>2</sub>	8.74	-
		PM	1.07	-
		PM <sub>10</sub>	1.07	-
		PM <sub>2.5</sub>	1.07	-

Emission Sources - Maximum Allowable Emission Rates

MVCU-1, MVCU-2, MVCU-3, MVCU-4, MVCU-5, & RAILVCU	Controlled Loading Annual Emissions Cap	VOC	-	68.38
		NO <sub>x</sub>	-	126.43
		CO	-	232.22
		H <sub>2</sub> S	-	0.39
		SO <sub>2</sub>	-	73.14
		PM	-	6.28
		PM <sub>10</sub>	-	6.28
		PM <sub>2.5</sub>	-	6.28
1-A	Boiler 1 (9)	VOC	0.52	-
		NO <sub>x</sub>	2.40	-
		CO	3.55	-
		SO <sub>2</sub>	0.06	-
		PM	0.72	-
		PM <sub>10</sub>	0.72	-
		PM <sub>2.5</sub>	0.72	-
1-B	Boiler 2 (9)	VOC	0.52	-
		NO <sub>x</sub>	2.40	-
		CO	3.55	-
		SO <sub>2</sub>	0.06	-
		PM	0.72	-
		PM <sub>10</sub>	0.72	-
		PM <sub>2.5</sub>	0.72	-



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1-C	Boiler 3 (9)	VOC	0.52	-
		NO <sub>x</sub>	2.40	-
		CO	3.55	-
		SO <sub>2</sub>	0.06	-
		PM	0.72	-
		PM <sub>10</sub>	0.72	-
		PM <sub>2.5</sub>	0.72	-
BOILERCAP	Boiler 1A to 1C Emission Caps	VOC	-	4.93
		NO <sub>x</sub>	-	10.06
		CO	-	33.79
		SO <sub>2</sub>	-	0.54
		PM	-	6.81
		PM <sub>10</sub>	-	6.81
		PM <sub>2.5</sub>	-	6.81
HTR1	Hot Oil Heater	VOC	0.22	0.94
		NO <sub>x</sub>	1.40	6.13
		CO	1.48	6.48
		SO <sub>2</sub>	0.02	0.10
		PM	0.30	1.31
		PM <sub>10</sub>	0.30	1.31
		PM <sub>2.5</sub>	0.30	1.31
2A	Small Boiler	VOC	0.07	0.31
		NO <sub>x</sub>	0.33	0.64
		CO	0.49	2.14
		SO <sub>2</sub>	0.01	0.03
		PM	0.10	0.43
		PM <sub>10</sub>	0.10	0.43
		PM <sub>2.5</sub>	0.10	0.43
FWP1	Fire Water Pump 1	VOC	2.02	0.10

Emission Sources - Maximum Allowable Emission Rates

		NO <sub>x</sub>	2.02	0.10
		CO	2.04	0.10
		SO <sub>2</sub>	0.63	0.03
		PM	0.10	0.01
		PM <sub>10</sub>	0.10	0.10
		PM <sub>2.5</sub>	0.10	0.10
FWP2	Fire Water Pump 2	VOC	2.02	0.10
		NO <sub>x</sub>	2.02	0.10
		CO	2.04	0.10
		SO <sub>2</sub>	0.63	0.03
		PM	0.10	0.01
		PM <sub>10</sub>	0.10	0.10
		PM <sub>2.5</sub>	0.10	0.10
FWP3	Fire Water Pump 3	VOC	2.02	0.10
		NO <sub>x</sub>	2.02	0.10
		CO	2.04	0.10
		SO <sub>2</sub>	0.63	0.03
		PM	0.10	0.01
		PM <sub>10</sub>	0.10	0.10
		PM <sub>2.5</sub>	0.10	0.10
FWP4	Fire Water Pump 4	VOC	2.02	0.10
		NO <sub>x</sub>	2.02	0.10
		CO	2.04	0.10
		SO <sub>2</sub>	0.63	0.03
		PM	0.10	0.01
		PM <sub>10</sub>	0.10	0.10
		PM <sub>2.5</sub>	0.10	0.10
FUG	Fugitives	VOC	4.99	24.41
		H <sub>2</sub> S	< 0.01	< 0.01

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MSS-U	MSS Emissions Cap – Uncontrolled	VOC	657.76	5.90
		H <sub>2</sub> S	0.29	< 0.01
MSS-C	MSS Emissions Cap Controlled	VOC	3.29	0.84
		NO <sub>x</sub>	5.54	13.88
		CO	7.38	18.50
		H <sub>2</sub> S	0.01	< 0.01
		SO <sub>2</sub>	1.47	1.23
		PM	0.28	0.69
		PM <sub>10</sub>	0.28	0.69
		PM <sub>2.5</sub>	0.28	0.69

- (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
- H<sub>2</sub>S - hydrogen sulfide
- 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
- (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) All tanks are subject to annual emission rate limits identified in EPN TANKCAP.
- (7) All temporary combustion units are subject to annual emission rate limits identified in T-COMB CAP.
- (8) All marine loading and railcar vapor combustion units are subject to annual emission rate limits identified in EPN "MVCU-1, VCU-2, MVCU-3, MVCU-4, MVCU-5, & RAILVCU".
- (9) Boilers 1A through 1-C are subject to annual emission rate limits identified in EPN BOILERCAP.

Date: September 27, 2019