

## Emission Sources — Maximum Allowable Emission Rates

Permit Number 5171

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)
VCU-1	Marine Loading Vapor Combustor No. 1	CO	9.83	
		NOx	4.93	
		SO2	0.02	
		VOC	17.20	
		PM	1.37	
		PM <sub>10</sub>	1.37	
		PM <sub>2.5</sub>	1.37	
VCU-2	Marine Loading Vapor Combustor No. 2	CO	9.83	
		NOx	4.93	
		SO2	0.02	
		VOC	17.20	
		PM	1.37	
		PM <sub>10</sub>	1.37	
		PM <sub>2.5</sub>	1.37	
VCU-1 and VCU-2	Marine Loading VCU No. 1 & 2 Annual Emission Caps	CO		5.91
		NOx		2.96
		SO2		0.01

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		VOC		7.89
		PM		0.82
		PM <sub>10</sub>		0.82
		PM <sub>2.5</sub>		0.82
MARINE	Marine Loading Losses – No Control	VOC	89.23	5.09
MARINE BD3	Marine Loading Losses – No Control	VOC	4.04	8.66
SUMP-1	Wastewater Sumps	VOC	9.24	9.41
TK-ATMDEGAS	Uncontrolled Tank Degassing (8)	VOC	103.35	---
TK-DEGAS	Controlled Tank Degassing (7)(9)	CO	6.64	7.02
		NO <sub>x</sub>	3.33	3.52
		SO <sub>2</sub>	0.01	0.01
		VOC	120.58	
TKVCU-1	Vapor Combustion Unit No. 1	CO	84.90	
		NO <sub>x</sub>	42.53	
		SO <sub>2</sub>	0.15	
		VOC	12.78	
TKVCU-2	Vapor Combustion Unit No. 2	CO	84.90	
		NO <sub>x</sub>	42.53	
		SO <sub>2</sub>	0.15	
		VOC	12.78	
TKVCU	Nos. 1 and 2 Annual Emission Cap	CO		59.97
		NO <sub>x</sub>		30.03
		SO <sub>2</sub>		0.07
		VOC		27.36

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TKVCU-3	Vapor Combustion Unit No. 3	CO	16.34	
		NOx	8.18	
		SO2	0.01	
		VOC	4.01	
TKVCU-4	Vapor Combustion Unit No. 4	CO	16.34	
		NOx	8.18	
		SO2	0.01	
		VOC	4.01	
TKVCU	Nos. 3 and 4 Annual Emission Cap	CO		9.31
		NOx		4.66
		SO2		0.01
		VOC		2.66
LAND T150-79	Tank 150-79 Roof Landings Activities (11)	CO	12.20	0.48
		NOx	6.11	0.24
		VOC	42.64	2.07
T5-11	Tank 5-11	VOC	13.66	
T5-12	Tank 5-12	VOC	1.51	
T5-15	Tank 5-15	VOC	13.66	
T5-16	Tank 5-16	VOC	13.66	
T10-1	Tank 10-1	VOC	1.75	
T10-2	Tank 10-2	VOC	13.66	
T10-4	Tank 10-4	VOC	1.29	
T10-6	Tank 10-6	VOC	1.75	
T10-7	Tank 10-7	VOC	1.38	

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T10-8	Tank 10-8	VOC	1.75	
T10-9	Tank 10-9	VOC	1.75	
T10-10	Tank 10-10	VOC	1.75	
T10-11	Tank 10-11	VOC	1.75	
T12-1	Tank 12-1	VOC	1.38	
T12-2	Tank 12-2	VOC	1.38	
T15-1	Tank 15-1	VOC	2.80	
T17-1	Tank 17-1	VOC	0.14	
T17-2	Tank 17-2	VOC	0.14	
T27-1	Tank 27-1	VOC	2.51	
T27-2	Tank 27-2	VOC	2.51	
T27-3	Tank 27-3	VOC	1.81	
T27-4	Tank 27-4	VOC	1.81	
T30-1	Tank 30-1	VOC	0.14	
T30-2	Tank 30-2	VOC	0.14	
T30-3	Tank 30-3	VOC	1.46	
T55-2	Tank 55-2	VOC	13.75	
T55-3	Tank 55-3	VOC	13.75	
T55-4	Tank 55-4	VOC	3.40	
T55-5	Tank 55-5	VOC	1.62	
T75-1	Tank 75-1	VOC	1.69	
T130-1	Tank 130-1	VOC	4.91	
T130-2	Tank 130-2	VOC	10.39	
T130-3	Tank 130-3	VOC	10.39	

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T130-4	Tank 130-4	VOC	7.93	
T130-5	Tank 130-5	VOC	10.39	
T130-6	Tank 130-6	VOC	4.60	
T130-7	Tank 130-7	VOC	4.60	
T130-9	Tank 130-9	VOC	10.39	
T130-10	Tank 130-10	VOC	10.39	
T130-11	Tank 130-11	VOC	4.60	
T130-12	Tank 130-12	VOC	10.39	
T130-13	Tank 130-13	VOC	3.59	
T130-14	Tank 130-14	VOC	31.63	
T130-15	Tank 130-15	VOC	3.59	
T150-1	Tank 150-1	VOC	10.57	
T150-2	Tank 150-2	VOC	4.78	
T150-3	Tank 150-3	VOC	10.57	
T150-4	Tank 150-4	VOC	10.57	
T150-5	Tank 150-5	VOC	10.57	
T150-6	Tank 150-6	VOC	10.57	
T150-7	Tank 150-7	VOC	10.57	
T150-8	Tank 150-8	VOC	3.70	
T150-9	Tank 150-9	VOC	10.57	
T150-10	Tank 150-10	VOC	10.57	
T150-11	Tank 150-11	VOC	10.57	
T150-12	Tank 150-12	VOC	10.47	
T150-13	Tank 150-13	VOC	3.70	

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T150-14	Tank 150-14	VOC	3.69	
T150-15	Tank 150-15	VOC	10.47	
T150-16	Tank 150-16	VOC	3.70	
T150-17	Tank 150-17	VOC	3.69	
T150-18	Tank 150-18	VOC	3.69	
T150-19	Tank 150-19	VOC	3.69	
T150-20	Tank 150-20	VOC	3.69	
T150-21	Tank 150-21	VOC	4.88	
T150-22	Tank 150-22	VOC	4.88	
T150-23	Tank 150-23	VOC	4.88	
T150-24	Tank 150-24	VOC	4.88	
T150-25	Tank 150-25	VOC	4.88	
T150-26	Tank 150-26	VOC	4.88	
T150-27	Tank 150-27	VOC	4.88	
T150-28	Tank 150-28	VOC	4.88	
T150-29	Tank 150-29	VOC	4.99	
T150-30	Tank 150-30	VOC	4.99	
T150-31	Tank 150-31	VOC	4.99	
T150-32	Tank 150-32	VOC	4.99	
T150-33	Tank 150-33	VOC	4.99	
T150-34	Tank 150-34	VOC	4.99	
T150-35	Tank 150-35	VOC	4.99	
T150-36	Tank 150-36	VOC	4.99	
T150-37	Tank 150-37	VOC	4.99	

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T150-38	Tank 150-38	VOC	4.99	
T150-39	Tank 150-39	VOC	4.99	
T150-40	Tank 150-40	VOC	4.99	
T150-41	Tank 150-41	VOC	4.99	
T150-42	Tank 150-42	VOC	4.99	
T150-43	Tank 150-43	VOC	4.99	
T150-44	Tank 150-44	VOC	31.52	
T150-45	Tank 150-45	VOC	31.52	
T150-46	Tank 150-46	VOC	31.52	
T150-47	Tank 150-47	VOC	6.05	
T150-48	Tank 150-48	VOC	6.05	
T150-49	Tank 150-49	VOC	4.58	
T150-50	Tank 150-50	VOC	4.58	
T150-51	Tank 150-51	VOC	3.71	
T150-52	Tank 150-52	VOC	3.71	
T150-53	Tank 150-53	VOC	4.58	
T150-54	Tank 150-54	VOC	4.58	
T150-55	Tank 150-55	VOC	4.58	
T150-56	Tank 150-56	VOC	4.58	
T150-57	Tank 150-57	VOC	4.58	
T150-58	Tank 150-58	VOC	4.58	
T150-59	Tank 150-59	VOC	4.71	
T150-60	Tank 150-60	VOC	4.71	
T150-61	Tank 150-61	VOC	4.71	

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T150-62	Tank 150-62	VOC	4.71	
T150-63	Tank 150-63	VOC	4.71	
T150-64	Tank 150-64	VOC	4.71	
T150-65	Tank 150-65	VOC	4.71	
T150-66	Tank 150-66	VOC	4.71	
T150-67	Tank 150-67	VOC	4.71	
T150-68	Tank 150-68	VOC	4.71	
T150-69	Tank 150-69	VOC	4.71	
T150-70	Tank 150-70	VOC	4.71	
T150-71	Tank 150-71	VOC	4.71	
T150-72	Tank 150-72	VOC	4.71	
T150-73	Tank 150-73	VOC	4.71	
T150-74	Tank 150-74	VOC	4.69	
T150-75	Tank 150-75	VOC	4.69	
T150-76	Tank 150-76	VOC	4.69	
T150-77	Tank 150-77	VOC	4.69	
T150-78	Tank 150-78	VOC	4.69	
T150-79	Tank 150-79	VOC	3.67	
T170-1	Tank 170-1	VOC	31.67	
T170-2	Tank 170-2	VOC	31.67	
T170-3	Tank 170-3	VOC	31.67	
T170-4	Tank 170-4	VOC	31.67	
T170-5	Tank 170-5	VOC	10.52	
T170-6	Tank 170-6	VOC	10.52	



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T170-7	Tank 170-7	VOC	10.52	
T200-1	Tank 200-1	VOC	10.43	
T200-2	Tank 200-2	VOC	10.43	
T200-3	Tank 200-3	VOC	10.43	
T250-1	Tank 250-1	VOC	10.40	
T250-2	Tank 250-2	VOC	10.40	
T300-1	Tank 300-1	VOC	10.42	
T300-2	Tank 300-2	VOC	31.89	
T300-3	Tank 300-3	VOC	10.37	
Landed Roof Refill Cap	Any 10 Tanks (6)	VOC	5564.43	
Annual Emissions Caps	All Tanks (7)	VOC		710.00
	Tank Maintenance Sub-Cap (10)	VOC		66.95
FUG+FUG M	Entire Process Fugitives (5)	VOC	8.23	36.05
TRUCKLOAD-1	Tank Truck Loading Rack (5)	VOC	1.51	2.22

Emission Sources - Maximum Allowable Emission Rates

- (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
- (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) Hourly emissions cap covers simultaneous re-filling of tanks pursuant to Special Condition No. 26 and emissions from tank roof landings attributable to routine product changes and planned maintenance, startup, and shutdown (MSS) activities as represented in Special Condition No. 18.
- (7) Annual emissions cap for tanks covers routine emissions, emissions from tank roof landings, controlled tank degassing, and uncontrolled tank degassing attributable to routine product changes and planned MSS activities as represented in Special Condition No. 18.
- (8) The uncontrolled degassing emission limit covers emissions from uncontrolled tank degassing attributable to routine product changes and planned MSS activities as represented in Special Condition No. 18.
- (9) Controlled degassing emission limits covers emissions from controlled tank degassing attributable to routine product changes and planned MSS activities as represented in Special Condition No. 18.
- (10) Tank maintenance sub-cap covers emissions from tank roof landings, controlled tank degassing, and uncontrolled tank degassing attributable to planned MSS activities as represented in Special Condition No. 18.A and 18.C.
- (11) Tank No. 150-79 roof landing, refilling, degassing, and venting emissions. Roof landing, refilling, and degassing emissions are routed to a portable vapor combustion unit.

Date: July 1, 2014