

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 3467B

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)
Group 1 - Storage Tanks				
B-001	Storage Tank B-1 (6.2 MB)	VOC	77.19	-
B-002	Storage Tank B-2 (6.2 MB)	VOC	77.19	-
B-003	Storage Tank B-3 (6.2 MB)	VOC	77.19	-
B-004	Storage Tank B-4 (6.2 MB)	VOC	77.19	-
B-005	Storage Tank B-5 (6.2 MB)	VOC	77.19	-
B-006	Storage Tank B-6 (6.2 MB)	VOC	77.19	-
B-007	Storage Tank B-7 (6.2 MB)	VOC	77.19	-
B-008	Storage Tank B-8 (6.2 MB)	VOC	77.19	-
B-009	Storage Tank B-9 (6.2 MB)	VOC	77.19	-
B-010	Storage Tank B-10 (6.2 MB)	VOC	77.19	-
B-011	Storage Tank B-11 (6.2 MB)	VOC	77.19	-
B-012	Storage Tank B-12 (6.2 MB)	VOC	77.19	-
B-013	Storage Tank B-13 (6.2 MB)	VOC	77.19	-
B-014	Storage Tank B-14 (6.2 MB)	VOC	77.19	-
B-015	Storage Tank B-15 (6.2 MB)	VOC	77.19	-
B-016	Storage Tank B-16 (6.2 MB)	VOC	77.19	-
B-017	Storage Tank B-17 (6.2 MB)	VOC	77.19	-
B-018	Storage Tank B-18 (6.2 MB)	VOC	77.19	-
B-019	Storage Tank B-19 (6.2 MB)	VOC	77.19	-
B-020	Storage Tank B-20 (6.2 MB)	VOC	77.19	-
B-021	Storage Tank B-21 (6.2 MB)	VOC	77.19	-
B-022	Storage Tank B-22 (6.2 MB)	VOC	77.19	-
B-023	Storage Tank B-23 (6.2 MB)	VOC	77.19	-
B-024	Storage Tank B-24 (6.2 MB)	VOC	77.19	-
B-025	Storage Tank B-25 (6.2 MB)	VOC	77.19	-
B-026	Storage Tank B-26 (6.2 MB)	VOC	77.19	-
B-027	Storage Tank B-27 (6.2 MB)	VOC	77.19	-
B-028	Storage Tank B-28 (6.2 MB)	VOC	77.19	-
B-029	Storage Tank B-29 (6.2 MB)	VOC	77.19	-
B-030	Storage Tank B-30 (6.2 MB)	VOC	77.19	-
B-031	Storage Tank B-31 (6.2 MB)	VOC	77.19	-

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B-032	Storage Tank B-32 (6.2 MB)	VOC	77.19	-
B-033	Storage Tank B-33 (6.2 MB)	VOC	77.19	-
B-034	Storage Tank B-34 (6.2 MB)	VOC	77.19	-
B-035	Storage Tank B-35 (6.2 MB)	VOC	77.19	-
B-036	Storage Tank B-36 (6.2 MB)	VOC	77.19	-
B-037	Storage Tank B-37 (6.2 MB)	VOC	77.19	-
B-038	Storage Tank B-38 (6.2 MB)	VOC	77.19	-
B-039	Storage Tank B-39 (6.2 MB)	VOC	77.19	-
B-040	Storage Tank B-40 (6.2 MB)	VOC	77.19	-
B-041	Storage Tank B-41 (7.0 MB)	VOC	77.19	-
B-200	Storage Tank B-200 (12.5 MB)	VOC	86.83	-
B-201	Storage Tank B-201 (12.5 MB)	VOC	86.83	-
B-202	Storage Tank B-202 (12.5 MB)	VOC	86.83	-
B-203	Storage Tank B-203 (12.5 MB)	VOC	86.83	-
B-204	Storage Tank B-204 (12.5 MB)	VOC	86.83	-
B-205	Storage Tank B-205 (12.5 MB)	VOC	86.83	-
B-206	Storage Tank B-206 (12.5 MB)	VOC	86.83	-
B-207	Storage Tank B-207 (12.5 MB)	VOC	86.83	-
B-208	Storage Tank B-208 (12.5 MB)	VOC	86.83	-
B-209	Storage Tank B-209 (12.5 MB)	VOC	86.83	-
B-210	Storage Tank B-210 (12.5 MB)	VOC	86.83	-
B-211	Storage Tank B-211 (12.5 MB)	VOC	86.83	-
B-212	Storage Tank B-212 (3.6 MB)	VOC	77.19	-
B-213	Storage Tank B-213 (6.7 MB)	VOC	77.19	-
B-214	Storage Tank B-214 (12.5 MB)	VOC	86.83	-
B-215	Storage Tank B-215 (12.5 MB)	VOC	86.83	-
B-216	Storage Tank B-216 (6.7 MB)	VOC	77.19	-
B-217	Storage Tank B-217 (37.5 MB)	VOC	46.32	-
B-218	Storage Tank B-218 (37.5 MB)	VOC	46.32	-
B-219	Storage Tank B-219 (12.5 MB)	VOC	86.83	-
B-220	Storage Tank B-220 (12.5 MB)	VOC	86.83	-
B-221	Storage Tank B-221 (12.5 MB)	VOC	86.83	-
B-222	Storage Tank B-222 (12.5 MB)	VOC	86.83	-
B-300	Storage Tank B-300 (25 MB)	VOC	115.78	-
B-301	Storage Tank B-301 (25 MB)	VOC	115.78	-
B-302	Storage Tank B-302 (25 MB)	VOC	115.78	-
B-303	Storage Tank B-303 (25 MB)	VOC	115.78	-
B-304	Storage Tank B-304 (25 MB)	VOC	115.78	-
B-305	Storage Tank B-305 (25 MB)	VOC	115.78	-
B-306	Storage Tank B-306 (25 MB)	VOC	115.78	-
B-307	Storage Tank B-307 (25 MB)	VOC	115.78	-
B-308	Storage Tank B-308 (25 MB)	VOC	115.78	-
B-309	Storage Tank B-309 (25 MB)	VOC	115.78	-

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B-310	Storage Tank B-310 (25 MB)	VOC	115.78	-
B-311	Storage Tank B-311 (25 MB)	VOC	115.78	-
B-313	Storage Tank B-313 (30 MB)	VOC	46.32	-
B-400	Storage Tank B-400 (50 MB)	VOC	46.32	-
B-401	Storage Tank B-401 (50 MB)	VOC	46.32	-
B-402	Storage Tank B-402 (50 MB)	VOC	46.32	-
B-403	Storage Tank B-403 (50 MB)	VOC	46.32	-
B-404	Storage Tank B-404 (50 MB)	VOC	46.32	-
B-405	Storage Tank B-405 (50 MB)	VOC	46.32	-
B-406	Storage Tank B-406 (50 MB)	VOC	46.32	-
B-407	Storage Tank B-407 (50 MB)	VOC	46.32	-
B-408	Storage Tank B-408 (50 MB)	VOC	46.32	-
B-409	Storage Tank B-409 (50 MB)	VOC	46.32	-
B-410	Storage Tank B-410 (50 MB)	VOC	46.32	-
B-411	Storage Tank B-411 (50 MB)	VOC	46.32	-
B-412	Storage Tank B-412 (50 MB)	VOC	46.32	-
B-413	Storage Tank B-413 (50 MB)	VOC	46.32	-
B-414	Storage Tank B-414 (50 MB)	VOC	46.32	-
B-415	Storage Tank B-415 (50 MB)	VOC	46.32	-
B-500	Storage Tank B-500 (50 MB)	VOC	68.82	-
B-501	Storage Tank B-501 (80 MB)	VOC	68.82	-
B-502	Storage Tank B-502 (80 MB)	VOC	68.82	-
B-503	Storage Tank B-503 (80 MB)	VOC	68.82	-
B-504	Storage Tank B-504 (80 MB)	VOC	68.82	-
B-505	Storage Tank B-505 (50 MB)	VOC	68.82	-
B-506	Storage Tank B-506 (50 MB)	VOC	68.82	-
B-507	Storage Tank B-507 (80 MB)	VOC	68.82	-
B-701	Storage Tank B-701 (50 MB)	VOC	46.32	-
B-702	Storage Tank B-702 (50 MB)	VOC	46.32	-
B-703	Storage Tank B-703 (50 MB)	VOC	46.32	-
B-704	Storage Tank B-704 (50 MB)	VOC	46.32	-
B-705	Storage Tank B-705 (50 MB)	VOC	46.32	-
B-706	Storage Tank B-706 (50 MB)	VOC	46.32	-
B-709	Storage Tank B-709 (100 MB)	VOC	1.83	-
B-710	Storage Tank B-710 (100 MB)	VOC	1.83	-
B-711	Storage Tank B-711 (100 MB)	VOC	1.83	-
B-712	Storage Tank B-712 (100 MB)	VOC	1.83	-
B-800	Storage Tank B-800 (150 MB) (7)	VOC	3.68	-
B-801	Storage Tank B-801 (120 MB)	VOC	41.60	-
B-802	Storage Tank B-802 (100 MB)	VOC	41.60	-
B-803	Storage Tank B-803 (100 MB)	VOC	41.60	-
B-804	Storage Tank B-804 (100 MB)	VOC	41.60	-
B-805	Storage Tank B-805 (100 MB)	VOC	41.60	-

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B-806	Storage Tank B-806 (100 MB)	VOC	41.60	-
B-807	Storage Tank B-807 (100 MB)	VOC	41.60	-
B-808	Storage Tank B-808 (100 MB)	VOC	41.60	-
B-809	Storage Tank B-809 (100 MB)	VOC	41.60	-
B-810	Storage Tank B-810 (100 MB)	VOC	41.60	-
B-811	Storage Tank B-811 (100 MB)	VOC	41.60	-
26	Tank V9201 (47 MB) (7)	VOC	2.33	-
27	Tank V9202 (5 MB) (7)	VOC	1.59	-
28	Tank V9203 (20 MB) (7)	VOC	1.83	-
29	Tank V9204 (7 MB) (7)	VOC	1.59	-
30	Tank V9205 (20 MB) (7)	VOC	1.83	-
31	Tank V9206 (8 MB) (7)	VOC	1.58	-
32	Tank V9217 (14 MB) (7)	VOC	1.58	-
33	Tank V9301 (15 MB) (7)	VOC	1.58	-
35	Tank V9303 (7.5 MB) (7)	VOC	1.58	-
36	Tank V9304 (8 MB) (7)	VOC	1.58	-
37	Tank V9305 (10 MB) (7)	VOC	1.58	-
38	Tank V9306 (10 MB) (7)	VOC	1.58	-
39	Tank V9407 (5 MB) (7)	VOC	2.96	-
58	Tank V9401 (115 MB) (7)	VOC	2.96	-
59	Tank V9402 (115 MB) (7)	VOC	2.96	-
60	Tank V9403 (115 MB) (7)	VOC	2.96	-
65	Tank V9223 (12 MB)	VOC	3.00	-
67	Tank V9701 (142 MB) (7)	VOC	3.68	-
75	Tank V9227 (7 MB) (7)	VOC	1.58	-
81	Tank V9601 (1 MB)	VOC	0.75	-
82	Tank V9602 (2 KB)	VOC	0.11	-
83	Tank V9603 (2 KB)	VOC	0.11	-
84	Tank V9604 (2 KB)	VOC	0.11	-
87	Tank V9608 (8 KB)	VOC	0.40	-
96	Tank V9606 (8 KB)	VOC	0.24	-
100	Tank V9266 (48 MB) (7)	VOC	2.33	-
101	Tank V1422 (20 MB)	VOC	3.00	-
103	Waste Storage Tank V1516 (12 MB) (7)	VOC	1.58	-
104	Waste Sump V1517	VOC	0.13	-
105	Waste Sump V1518	VOC	0.13	-
108	Waste Sump V9246	VOC	0.02	-
109	Waste Sump V9263	VOC	0.07	-
110	Waste Sump V9264	VOC	0.33	-
111	Waste Sump V9265	VOC	0.33	-
112	Wastewater Tank V9207	VOC	0.42	-
113	Wastewater Tank V9225	VOC	0.42	-

## Emission Sources - Maximum Allowable Emission Rates

Group 1	Annual Emissions	VOC	-	148.84
<b>Group 2 - Storage Tanks</b>				
B-709, B-710, B-711, and B-712	Annual Sub-cap Emissions (6)	VOC	-	20.59
<b>Storage Tanks</b>	Total Refill and Roof Landing Cap (6)	VOC	1385.00	-
<b>Group 3 - Truck/Rail/Drum Loading and Depressurizing - All Spots (No Controls)</b>				
3	Drum Loading	VOC	12.30	-
14	Tank Truck/Railcar Loading	VOC	0.64	-
LR-1	Tank Truck/Railcar Loading Rack 34 spots	VOC	43.28	-
LR-2	Tank Truck Loading Rack 4 spots	VOC	13.52	-
LR-3	Tank Truck Loading Rack 6 spots	VOC	13.52	-
LR-4	Railcar Loading Rack 24 spots	VOC	43.28	-
LR-5	Tank Truck Loading Rack 4 spots	VOC	13.52	-
Group 3	Annual Emissions	VOC	-	4.21
<b>Group 4 - Barge/Ship Loading - All Docks (No Controls)</b>				
1	Ship Dock No. 1 Loading	VOC	1.81	-
MT-1	Ship Dock No. 2 Loading	VOC	22.72	-
MT-2	Ship Dock No. 3 Loading	VOC	22.72	-
2	Barge Dock No. 1 and	VOC	0.31	-
BG-1	Barge Dock No. 3 Loading	VOC	56.80	-
Group 4	Annual Emissions	VOC	--	16.71
<b>Group 5 - Flares Land Based</b>				
FL-1	Truck/Railcar Loading Rack Flare No. 1	NO <sub>x</sub>	0.79	-
		CO	6.81	-
		VOC	14.99	-
FL-2	Styrene Storage Tanks Flare	NO <sub>x</sub>	0.79	-
		CO	6.81	-
		VOC	14.99	-
FL-3	Loading Rack Flare No. 2	NO <sub>x</sub>	0.79	-

## Emission Sources - Maximum Allowable Emission Rates

		CO	6.81	-
		VOC	14.99	-
FL-6	Emergency Flare	NO <sub>x</sub>	0.02	-
		CO	0.04	-
		VOC	0.18	-
Group 5	Annual Emissions	NO <sub>x</sub>	-	1.30
		CO	-	11.12
		VOC	-	5.30
<b>Group 6 - Flares Marine Loading</b>				
FL-4	Marine Loading Flare	NO <sub>x</sub>	2.08	-
		CO	17.92	-
		VOC	33.25	-
FL-5	Marine Flare	NO <sub>x</sub>	2.08	-
		CO	17.92	-
		VOC	33.25	-
FL-7	Marine Flare	NO <sub>x</sub>	7.13	-
		VOC	94.00	-
Group 6	Annual Emissions	NO <sub>x</sub>	-	2.47
		CO	-	21.11
		VOC	-	13.12
VO-1	Truck/Railcar/Barge/Ship/Drum/ Storage Tanks Loading and Depressurizing (vapor oxidizer)	NO <sub>x</sub>	10.97	20.46
		CO	5.43	9.12
		VOC	6.00	1.93
		PM <sub>10</sub>	0.49	0.82
		PM <sub>2.5</sub>	0.49	0.82
		SO <sub>2</sub>	0.04	0.07
FUG,FUG-M, and FU-1	Fugitives (5)	VOC	9.79	26.17
<b>Group 7 - Steam Boilers</b>				
BLR-3	Cleaver Brooks Steam Boiler 600-hp	NO <sub>x</sub>	3.48	-
		CO	0.87	-
		VOC	0.07	-
		PM <sub>10</sub>	0.15	-
		SO <sub>2</sub>	0.36	-
BLR-4	Reliance 3WB350 Steam Boiler 350-hp	NO <sub>x</sub>	2.09	-
		CO	0.52	-
		VOC	0.04	-
		PM <sub>10</sub>	0.09	-
		SO <sub>2</sub>	0.21	-

Emission Sources - Maximum Allowable Emission Rates

Group 7	Annual Emissions	NO <sub>x</sub>	-	22.26
		CO	-	5.56
		VOC	-	0.44
		PM <sub>10</sub>	-	0.99
		SO <sub>2</sub>	-	2.27
<b>BLR-5</b>	Cleaver Brooks Steam Boiler 600-hp	NO <sub>x</sub>	0.73	3.22
		CO	2.06	9.01
		VOC	0.13	0.59
		PM <sub>10</sub>	0.15	0.82
		SO <sub>2</sub>	0.01	0.06
TK-Refill	Tank Refill Control (6)	NO <sub>x</sub>	1.62	-
		CO	13.90	-
		VOC	34.40	-
B-707F	Storage Tank B-707F	VOC	1.47	1.87
B-708F	Storage Tank B-708F	VOC	1.47	1.87
B-9406S	B-9406 Acetic Acid Scrubber	VOC	0.01	<0.01
B-9405S	B-9405 Vinyl Acetate Scrubber	VOC	0.01	<0.01

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an 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  
CO - carbon monoxide  
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  
SO<sub>2</sub> - sulfur dioxide
- (4) Compliance with annual emission limits is based on a rolling 12-month period.
- (5) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (6) The annual allowable emission rate for these tanks is a sub-cap which includes routine and roof landing emissions, and is itself included in the overall cap of 148.87 tons per year for all tanks. The overall cap also includes roof landing emissions for tanks other than B709-712.
- (7) Short-term storage tank allowable emission rates are have been calculated based on gasoline in an internal floating roof.

Date: September 30, 2014