

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 | - |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|-------|------------------------------|-----|--------|---|
| B-031 | Storage Tank B-31 (6.2 MB) | VOC | 77.19 | - |
| 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 | - |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|-------|----------------------------------|-----|--------|---|
| B-309 | Storage Tank B-309 (25 MB) | VOC | 115.78 | - |
| 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) (10) | 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 | - |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|-------|---------------------------------------|-----|-------|---|
| B-805 | Storage Tank B-805 (100 MB) | VOC | 41.60 | - |
| 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) (10) | VOC | 2.33+ | - |
| 27 | Tank V9202 (5 MB) (10) | VOC | 1.59+ | - |
| 28 | Tank V9203 (20 MB) (10) | VOC | 1.83+ | - |
| 29 | Tank V9204 (7 MB) (10) | VOC | 1.59+ | - |
| 30 | Tank V9205 (20 MB) (10) | VOC | 1.83+ | - |
| 31 | Tank V9206 (8 MB) (10) | VOC | 1.58+ | - |
| 32 | Tank V9217 (14 MB) (10) | VOC | 1.58+ | - |
| 33 | Tank V9301 (15 MB) (10) | VOC | 1.58+ | - |
| 34 | Tank V9302 (8 MB) (10) | VOC | 1.58+ | - |
| 35 | Tank V9303 (7.5 MB) (10) | VOC | 1.58+ | - |
| 36 | Tank V9304 (8 MB) (10) | VOC | 1.58+ | - |
| 37 | Tank V9305 (10 MB) (10) | VOC | 1.58+ | - |
| 38 | Tank V9306 (10 MB) (10) | VOC | 1.58+ | - |
| 39 | Tank V9407 (5 MB) (10) | VOC | 2.96+ | - |
| 58 | Tank V9401 (115 MB) (10) | VOC | 2.96+ | - |
| 59 | Tank V9402 (115 MB) (10) | VOC | 2.96+ | - |
| 60 | Tank V9403 (115 MB) (10) | VOC | 2.96+ | - |
| 65 | Tank V9223 (12 MB) | VOC | 3.00 | - |
| 67 | Tank V9701 (142 MB) (10) | VOC | 3.68+ | - |
| 75 | Tank V9227 (7 MB) (10) | 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) (10) | VOC | 2.33+ | - |
| 101 | Tank V1422 (20 MB) | VOC | 3.00 | - |
| 103 | Waste Storage Tank V1516 (12 MB) (10) | VOC | 1.58+ | - |
| 104 | Waste Sump V1517 (7) | VOC | 0.13 | - |
| 105 | Waste Sump V1518 (7) | VOC | 0.13 | - |
| 108 | Waste Sump V9246 (7) | VOC | 0.02 | - |
| 109 | Waste Sump V9263 (7) | VOC | 0.07 | - |
| 110 | Waste Sump V9264 (7) | VOC | 0.33 | - |
| 111 | Waste Sump V9265 (7) | VOC | 0.33 | - |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|-----------------|---------|--------|
| 112 | Wastewater Tank V9207 (7) | VOC | 0.42 | - |
| 113 | Wastewater Tank V9225 (7) | VOC | 0.42 | - |
| Group 1 | Annual Emissions | VOC | - | 148.84 |
| Group 2 - Storage Tanks | | | | |
| B-709, B-710, B-711, and B-712 | Annual Sub-cap Emissions (9) | VOC | - | 20.59 |
| Storage Tanks | Total Refill and Roof Landing Cap (9) | VOC | 1385.00 | - |
| Group 3 - Truck/Rail/Drum Loading and Depressurizing - All Spots (No Controls) | | | | |
| 3 | Drum Loading | VOC | 12.30 | - |
| 14 | Tank Truck/Railcar Loading | VOC | 0.64 | - |
| LR-1 | Tank Truck/Railcar Loading Rack | VOC | 43.28 | - |
| LR-2 | Tank Truck Loading Rack | VOC | 13.52 | - |
| LR-3 | Tank Truck Loading Rack | VOC | 13.52 | - |
| LR-4 | Railcar Loading Rack | VOC | 43.28 | - |
| LR-5 | Tank Truck Loading Rack | VOC | 13.52 | - |
| Group 3 | Annual Emissions | VOC | - | 4.21 |
| SRT 1-5 | Tank Truck Unloading Rack (6) | VOC | - | - |
| Group 4 - Barge/Ship Loading - All Docks (No Controls) | | | | |
| 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 |
| Group 5 - Flares Land Based | | | | |
| FL-1 | Truck/Railcar Loading Rack (8) Flare No. 1 | NO _x | 0.79 | - |
| | | CO | 6.81 | - |
| | | VOC | 14.99 | - |
| FL-2 | Styrene Storage Tanks Flare (8) | NO _x | 0.79 | - |
| | | CO | 6.81 | - |
| | | VOC | 14.99 | - |
| FL-3 | Loading Rack Flare No. 2 | NO _x | 0.79 | - |
| | | CO | 6.81 | - |
| | | VOC | 14.99 | - |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---------------------------------|---|-------------------|-------|-------|
| FL-6 | Emergency Flare (8) | NO _x | 0.02 | - |
| | | CO | 0.04 | - |
| | | VOC | 0.18 | - |
| Group 5 | Annual Emissions | NO _x | - | 1.30 |
| | | CO | - | 11.12 |
| | | VOC | - | 5.30 |
| Group 6 - Flares Marine Loading | | | | |
| FL-4 | Marine Loading Flare (8) | NO _x | 2.08 | - |
| | | CO | 17.92 | - |
| | | VOC | 33.25 | - |
| FL-5 | Marine Flare (8) | NO _x | 2.08 | - |
| | | CO | 17.92 | - |
| | | VOC | 33.25 | - |
| FL-7 | Marine Flare (8) | NO _x | 7.13 | - |
| | | VOC | 94.00 | - |
| Group 6 | Annual Emissions | NO _x | - | 2.47 |
| | | CO | - | 21.11 |
| | | VOC | - | 13.12 |
| VO-1 | Truck/Railcar/Barge/Ship/Drum/ Storage Tanks Loading and Depressurizing (vapor oxidizer) (8) | NO _x | 10.97 | 20.46 |
| | | CO | 5.43 | 9.12 |
| | | VOC | 6.00 | 1.93 |
| | | PM ₁₀ | 0.49 | 0.82 |
| | | PM _{2.5} | 0.49 | 0.82 |
| | | SO ₂ | 0.04 | 0.07 |
| FUG,FUG-M, and FU-1 | Fugitives (5) | VOC | 9.79 | 26.17 |
| Group 7 - Steam Boilers | | | | |
| BLR-3 | Cleaver Brooks Steam Boiler 600-hp (8) | NO _x | 3.48 | - |
| | | CO | 0.87 | - |
| | | VOC | 0.07 | - |
| | | PM ₁₀ | 0.15 | - |
| | | SO ₂ | 0.36 | - |
| BLR-4 | Reliance 3WB350 Steam Boiler 350-hp (8) | NO _x | 2.09 | - |
| | | CO | 0.52 | - |
| | | VOC | 0.04 | - |
| | | PM ₁₀ | 0.09 | - |
| | | SO ₂ | 0.21 | - |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|--------------|---|------------------|-------|-------|
| Group 7 | Annual Emissions | NO _x | - | 22.26 |
| | | CO | - | 5.56 |
| | | VOC | - | 0.44 |
| | | PM ₁₀ | - | 0.99 |
| | | SO ₂ | - | 2.27 |
| BLR-5 | Cleaver Brooks Steam Boiler 600-hp (8) | NO _x | 0.73 | 3.22 |
| | | CO | 2.06 | 9.01 |
| | | VOC | 0.13 | 0.59 |
| | | PM ₁₀ | 0.15 | 0.82 |
| | | SO ₂ | 0.01 | 0.06 |
| TK-Refill | Tank Refill Control (9) | NO _x | 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_x - total oxides of nitrogen
CO - carbon monoxide
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
SO₂ - 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) Unloading, vapor balance, or vapor control service only (no emissions).
- (7) Emission rates for the six waste sumps and the two wastewater tanks shall be calculated on an annual basis. **(11/06)**
- (8) The NO_x and CO emissions shall be calculated on a rolling quarterly basis. **(11/06)**
- (9) 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. **(7/10)**
- (10) Short-term storage tank allowable emission rates are based on operation as fixed-roof tanks. Tanks shown with a "+" have been calculated based on gasoline in an internal floating roof and does not reflect the maximum emission rate when operated as a fixed-roof tank.
- (11) The short-term emission rates (lb/hr) are per spot.

Date: September 30, 2013