MAXIMUM ALLOWABLE EMISSION RATE TABLE
Emission Caps and Individual Emission Limitations

Flexible Permit Number 5631

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. Any proposed increase in Emission Rates May Require an Application for a Modification of the Facilities Covered by this Permit. **(03/06)**

| | | AIR CONTAMINANTS DATA | |
|---|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * Lb/hr Tpy |
| 27-14 | Internal Floating Roof Tank | VOC | |
| 27-15 | Internal Floating Roof Tank | VOC | |
| 80-7 | Internal Floating Roof Tank | VOC | |
| 80-10 | Internal Floating Roof Tank | VOC | |
| 80-12 | Internal Floating Roof Tank | VOC | |
| 80-43 | Internal Floating Roof Tank | VOC | |
| 80-44 | Internal Floating Roof Tank | VOC | |
| 80-45 | Internal Floating Roof Tank | VOC | |
| 80-46 | Internal Floating Roof Tank | VOC | |
| 100-47 | Internal Floating Roof Tank | VOC | |
| 100-48 | Internal Floating Roof Tank | VOC | |
| 100-49 | Internal Floating Roof Tank | VOC | |
| 100-54 | Internal Floating Roof Tank | VOC | |
| 100-55 | Internal Floating Roof Tank | VOC | |
| 100-56 | Internal Floating Roof Tank | VOC | |
| 100-58 | Internal Floating Roof Tank | VOC | |
| 100-59 | Internal Floating Roof Tank | VOC | |
| 150-9 | Internal Floating Roof Tank | VOC | |
| 150-40 | Internal Floating Roof Tank | VOC | |
| 150-41 | Internal Floating Roof Tank | VOC | |
| 150-42 | Internal Floating Roof Tank | VOC | |
| 200-8 | Internal Floating Roof Tank | VOC | |
| 200-11 | Internal Floating Roof Tank | VOC | |
| 200-51 | Internal Floating Roof Tank | VOC | |
| 200-53 | Internal Floating Roof Tank | VOC | |
| 250-50 | Internal Floating Roof Tank | VOC | |
| 250-52 | Internal Floating Roof Tank | VOC | |
| 260-5 | Internal Floating Roof Tank | VOC | |
| 260-6 | Internal Floating Roof Tank | VOC | |
| 300-1 | Internal Floating Roof Tank | VOC | |

EMISSION SOURCES - EMISSIONS CAPS AND INDIVIDUAL EMISSION LIMITATIONS

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * lb/hr | TPY |
|---|---|---|---|---|
| 300-2 | Internal Floating Roof Tank | VOC | | |
| 300-3 | Internal Floating Roof Tank | VOC | | |
| 300-4 | Internal Floating Roof Tank | VOC | | |
| 300-21 | Internal Floating Roof Tank | VOC | | |
| 300-22 | Internal Floating Roof Tank | VOC | | |
| C80-3 | Internal Floating Roof Tank | VOC | | |
| C80-4 | Internal Floating Roof Tank | VOC | | |
| LD-111 | Internal Floating Roof Tank | VOC | | |
| LD-112 | Internal Floating Roof Tank | VOC | | |
| LD-113 | Internal Floating Roof Tank | VOC | | |
| LD-114 | Internal Floating Roof Tank | VOC | | |
| TH-501 | Internal Floating Roof Tank | VOC | | |
| TH-502 | Internal Floating Roof Tank | VOC | | |
| C30-10 | Fixed-roof Tank | VOC | | |
| C80-1 | Fixed-roof Tank | VOC | | |
| C80-2 | Fixed-roof Tank | VOC | | |
| C30-13 | Fixed-roof Tank | VOC | | |
| LD-115 | Fixed-roof Tank | VOC | | |
| LD-116 | Fixed-roof Tank | VOC | | |
| FUG 100 | 100 Manifold Fugitives (4) | VOC | | |
| FUG 300 | 300 Manifold Fugitives (4) | VOC | | |
| FUG 500 | 500 Manifold Fugitives (4) | VOC | | |
| FUG C | C Manifold Fugitives (4) | VOC | | |
| FUG D | D Manifold Fugitives (4) | VOC | | |
| SD-1 | Ship Dock 1 Fugitives (4) | VOC | | |
| BD-B | Barge Dock B Fugitives (4) | VOC | | |
| TR-1 | Truck Loading Rack 1 | VOC | | |
| MLF-1 | Marine Loading Flare | VOC | | |
| 500 | Allison Gas Turbine | VOC | | |
| E-1 | Engine | VOC | | |
| E-2 | Engine | VOC | | |
| H-1 | Heater | VOC | | |

**VOC Emission Caps**

| | | |
|---|---|---|
| **Overall** | **507.61**(6) | **257.28** (8) |

EMISSION SOURCES - EMISSIONS CAPS AND INDIVIDUAL EMISSION LIMITATIONS

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * lb/hr | TPY |
|---|---|---|---|---|
| **Maintenance, Start-Up, and Shutdown Emissions (MSS) 137.00** (9) | | | | (7) |
| 27-14 | Internal Floating Roof Tank | BZ | | |
| 27-15 | Internal Floating Roof Tank | BZ | | |
| 80-7 | Internal Floating Roof Tank | BZ | | |
| 80-10 | Internal Floating Roof Tank | BZ | | |
| 80-12 | Internal Floating Roof Tank | BZ | | |
| 80-43 | Internal Floating Roof Tank | BZ | | |
| 80-44 | Internal Floating Roof Tank | BZ | | |
| 80-45 | Internal Floating Roof Tank | BZ | | |
| 80-46 | Internal Floating Roof Tank | BZ | | |
| 100-47 | Internal Floating Roof Tank | BZ | | |
| 100-48 | Internal Floating Roof Tank | BZ | | |
| 100-49 | Internal Floating Roof Tank | BZ | | |
| 100-54 | Internal Floating Roof Tank | BZ | | |
| 100-55 | Internal Floating Roof Tank | BZ | | |
| 100-56 | Internal Floating Roof Tank | BZ | | |
| 100-58 | Internal Floating Roof Tank | BZ | | |
| 100-59 | Internal Floating Roof Tank | BZ | | |
| 150-9 | Internal Floating Roof Tank | BZ | | |
| 150-40 | Internal Floating Roof Tank | BZ | | |
| 150-41 | Internal Floating Roof Tank | BZ | | |
| 150-42 | Internal Floating Roof Tank | BZ | | |
| 200-8 | Internal Floating Roof Tank | BZ | | |
| 200-11 | Internal Floating Roof Tank | BZ | | |
| 200-51 | Internal Floating Roof Tank | BZ | | |
| 200-53 | Internal Floating Roof Tank | BZ | | |
| 250-50 | Internal Floating Roof Tank | BZ | | |
| 250-52 | Internal Floating Roof Tank | BZ | | |
| 260-5 | Internal Floating Roof Tank | BZ | | |
| 260-6 | Internal Floating Roof Tank | BZ | | |
| 300-1 | Internal Floating Roof Tank | BZ | | |
| 300-2 | Internal Floating Roof Tank | BZ | | |
| 300-3 | Internal Floating Roof Tank | BZ | | |
| 300-4 | Internal Floating Roof Tank | BZ | | |
| 300-21 | Internal Floating Roof Tank | BZ | | |

EMISSION SOURCES - EMISSIONS CAPS AND INDIVIDUAL EMISSION LIMITATIONS

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * lb/hr | TPY |
|---|---|---|---|---|
| 300-22 | Internal Floating Roof Tank | BZ | | |
| C80-3 | Internal Floating Roof Tank | BZ | | |
| C80-4 | Internal Floating Roof Tank | BZ | | |
| LD-111 | Internal Floating Roof Tank | BZ | | |
| LD-112 | Internal Floating Roof Tank | BZ | | |
| LD-113 | Internal Floating Roof Tank | BZ | | |
| LD-114 | Internal Floating Roof Tank | BZ | | |
| TH-501 | Internal Floating Roof Tank | BZ | | |
| TH-502 | Internal Floating Roof Tank | BZ | | |
| C30-10 | Fixed-Roof Tank | BZ | | |
| C80-1 | Fixed-Roof Tank | BZ | | |
| C80-2 | Fixed-Roof Tank | BZ | | |
| C30-13 | Fixed-Roof Tank | BZ | | |
| LD-115 | Fixed-Roof Tank | BZ | | |
| LD-116 | Fixed-Roof Tank | BZ | | |
| FUG 100 | 100 Manifold Fugitives (4) | BZ | | |
| FUG 300 | 300 Manifold Fugitives (4) | BZ | | |
| FUG 500 | 500 Manifold Fugitives (4) | BZ | | |
| FUG C | C Manifold Fugitives (4) | BZ | | |
| FUG D | D Manifold Fugitives (4) | BZ | | |
| SD-1 | Ship Dock 1 Fugitives (4) | BZ | | |
| BD-B | Barge Dock B Fugitives (4) | BZ | | |
| TR-1 | Truck Loading Rack 1 | BZ | | |
| MLF-1 | Marine Loading Flare | BZ | | |
| **Benzene Emission Caps** | | | | |
| **Overall-** | | **BZ** | **49.33** (10) | **10.39** (12) |
| **Maintenance, Start-Up, and Shutdown Emissions (MSS) -** | | | **BZ** | **59.82** (11) |
| | **6.91** (13) | | | |
| MLF-1 | Marine Loading Flare | $NO_x$, CO | | |
| 500 | Allison Gas Turbine | $NO_x$, CO | | |
| E-1 | Engine | $NO_x$, CO | | |
| E-2 | Engine | $NO_x$, CO | | |
| H-1 | Heater | $NO_x$, CO | | |
| | **Emission Cap** | **$NO_x$** | **23.23** | **72.49** |

EMISSION SOURCES - EMISSIONS CAPS AND INDIVIDUAL EMISSION LIMITATIONS

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * lb/hr | TPY |
|---|---|---|---|---|
| | **Emission Cap** | **CO** | **24.85** | **45.88** |
| 500 | Allison Gas Turbine | PM, $SO_2$ | | |
| E-1 | Engine | PM, $SO_2$ | | |
| E-2 | Engine | PM, $SO_2$ | | |
| H-1 | Heater | PM, $SO_2$ | | |
| | **Emission Cap** | **PM** | **0.36** | **1.58** |
| | **Emission Cap** | **$SO_2$** | **0.04** | **0.19** |
| PORTFLARE | Portable Flares | $NO_x$ | 11.60 | 4.99 |
| | | CO | 23.16 | 9.96 |
| | | VOC | 86.98 | (9) |
| | | BZ | 29.30 | (13) |
| **Boilers and Turbines** | | | | |
| S-4 | Boiler | VOC | 0.14 | 0.61 |
| | | $NO_x$ | 15.45 | 67.67 |
| | | CO | 4.01 | 17.55 |
| | | PM | 0.50 | 2.19 |
| | | $SO_2$ | 0.06 | 0.26 |
| S-7 | Ibw Gas-Fired Boiler | VOC | 0.32 | 1.42 |
| | 73.4 MMBtu | $NO_x$ | 3.67 | 16.08 |
| | | CO | 2.79 | 12.22 |
| | | PM | 0.37 | 1.61 |
| | | $SO_2$ | 0.04 | 0.19 |
| S-8 | Ibw Gas-Fired Boiler | VOC | 0.32 | 1.42 |

EMISSION SOURCES - EMISSIONS CAPS AND INDIVIDUAL EMISSION LIMITATIONS

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * lb/hr | TPY |
|---|---|---|---|---|
| | 73.4 MMBtu | $NO_x$ | 3.67 | 16.08 |
| | | CO | 2.79 | 12.22 |
| | | PM | 0.37 | 1.61 |
| | | $SO_2$ | 0.04 | 0.19 |
| **Individual Fugitive Areas** | | | | |
| FUG600 | 600 Manifold Fugitives (4) | VOC | 0.04 | 0.18 |
| | (Source: Permit 51545) | BZ | 0.04 | 0.18 |
| **Individual Tanks** | | | | |
| 80-62 | Internal Floating Roof Tank | VOC | 8.29 | 2.11 |
| | [(14), Source: PBR Reg. 76993] | BZ | 0.42 | 0.09 |
| 80-64 | Internal Floating Roof Tank | VOC | 8.29 | 2.11 |
| | [(14), Source: PBR Reg. 76993] | BZ | 0.42 | 0.09 |
| 100-57 | Internal Floating Roof Tank | VOC | 7.55 | 3.64 |
| | (Source: Permit 51545) | BZ | 1.78 | 1.71 |
| 100-60 | Internal Floating Roof Tank | VOC | 7.65 | 3.01 |
| | [(14), Source: PBR Reg. 76993] | BZ | 0.38 | 0.13 |
| 100-61 | Internal Floating Roof Tank | VOC | 7.65 | 3.01 |
| | [(14), Source: PBR Reg. 76993] | BZ | 0.38 | 0.13 |
| 100-63 | Internal Floating Roof Tank | VOC | 7.65 | 3.01 |
| | [(14), Source: PBR Reg. 76993] | BZ | 0.38 | 0.13 |
| 175-59 | Internal Floating Roof Tank | VOC | 6.09 | 2.26 |
| | [(14), Source: PBR Reg. 55908] | BZ | 0.31 | 0.09 |
| 200-20 | Internal Floating Roof Tank | VOC | 5.66 | 4.37 |
| | [(14), Source: PBR Reg. 78592] | BZ | 0.28 | 0.19 |

EMISSION SOURCES - EMISSIONS CAPS AND INDIVIDUAL EMISSION LIMITATIONS

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * lb/hr | TPY |
|---|---|---|---|---|
| 200-56 | Internal Floating Roof Tank (5) [(14), Source: PBR Reg. 50048] | VOC | 2.01 | 2.67 |
| 200-57 | Internal Floating Roof Tank (5) [(14), Source: PBR Reg. 50048] | VOC | 2.01 | 2.67 |
| 200-58 | Internal Floating Roof Tank (5) [(14), Source: PBR Reg. 50048] | VOC | 2.01 | 2.67 |
| 300-25 | Internal Floating Roof Tank (Source: Permit 51545) | VOC<br>BZ | 5.16<br>0.55 | 11.53<br>0.81 |
| 390-23 | Internal Floating Roof Tank (5) [(14), Source: PBR Reg. 51287] | VOC | 4.31 | 3.91 |
| 390-24 | Internal Floating Roof Tank (Source: Permit 51545) | VOC<br>BZ | 4.31<br>0.29 | 3.91<br>0.65 |
| 390-25 | Internal Floating Roof Tank [(14), Source: PBR Reg. 78592] | VOC<br>BZ | 4.74<br>0.23 | 6.00<br>0.26 |
| 390-26 | Internal Floating Roof Tank [(14), Source: PBR Reg. 78592] | VOC<br>BZ | 4.74<br>0.23 | 6.00<br>0.26 |
| 390-27 | Internal Floating Roof Tank [(14), Source: PBR Reg. 78592] | VOC<br>BZ | 4.74<br>0.23 | 6.00<br>0.26 |
| 390-30 | Internal Floating Roof Tank [(14), Source: PBR Reg. 81089] | VOC<br>BZ | 4.74<br>0.23 | 4.70<br>0.13 |
| 390-31 | Internal Floating Roof Tank [(14), Source: PBR Reg. 81089] | VOC<br>BZ | 4.74<br>0.23 | 4.70<br>0.13 |
| 390-32 | Internal Floating Roof Tank [(14), Source: PBR Reg. 81089] | VOC<br>BZ | 4.74<br>0.23 | 4.70<br>0.13 |

EMISSION SOURCES - EMISSIONS CAPS AND INDIVIDUAL EMISSION LIMITATIONS

AIR CONTAMINANTS DATA

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates * lb/hr | TPY |
|---|---|---|---|---|
| 390-33 | Internal Floating Roof Tank | VOC | 4.74 | 4.70 |
| | [(14), Source: PBR Reg. 81089] | BZ | 0.23 | 0.13 |
| 390-34 | Internal Floating Roof Tank | VOC | 4.74 | 4.70 |
| | [(14), Source: PBR Reg. 81089] | BZ | 0.23 | 0.13 |

(1) Emission Point Identification - specific equipment designation or emission point number from plot plan.
(2) Specific Point Source Name - use area name or fugitive source name for fugitive area sources
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
BZ - benzene
$NO_x$ - total oxides of nitrogen
CO - carbon monoxide
PM - particulate matter, suspended in the atmosphere, including $PM_{10}$
$PM_{10}$ - particulate matter equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed That No Particulate Matter Greater than 10 Microns Is Emitted.
$SO_2$ - sulfur dioxide
(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
(5) Emission rates were calculated based on the PBR requirements at the time of submittal to TCEQ; i.e., only VOC emissions are quantified. Estimated rates of benzene emissions from these sources would be based on the 'Emissions of Crude Oil and Refinery Petroleum Fractions Containing Less Than 10% Benzene', defined in Table 478 of 30 TAC §106.478.

***VOC Emission Caps:***

(6) Overall VOC Cap (lb/hr) - Applicable only to the hourly VOC emissions from routine operations of the permitted sources for which no individual emission rate is specified by this permit. This emission rate limit includes the overall BZ lb./hr. cap defined in (10) but does not authorize emissions of this constituent greater than its specified cap.

(7) The maintenance, start-up, and shutdown (MSS) VOC Cap (lb/hr) - Separate from the Overall VOC Cap (lb./hr.), applicable only to the total VOC emissions from the standing idle, re-filling, and de-gassing periods of the roof landing operations conducted for any combination of IFR vessels authorized by this permit. The maximum value of the overall MSS VOC lb./hr. cap is compound-specific, and determined by the equation in Special Condition No. 19 with use of 0.80 as the value of the specified factor (note: the value of the factor in Special Condition No. 19, i.e., 0.75,

EMISSION SOURCES - EMISSIONS CAPS AND INDIVIDUAL EMISSION LIMITATIONS

applicable only to re-fill emissions). The MSS VOC (lb/hr) limit includes the MSS BZ lb/hr cap defined in (11) but does not authorize emissions of this constituent greater than its specified cap.

(8) Overall VOC Cap (TPY) - Applicable only to the annual VOC emissions from ( a) the routine operations of the permitted sources for which no individual emission rate is specified by this permit, and ( b) the MSS operations covered by the emissions authorizations in the MSS VOC Cap (TPY) (i.e., the MSS VOC Subcap is a component of the overall VOC Cap, but is applicable only to the MSS operations, including those associated with tank roof landings, of the permitted sources). The Overall VOC (TPY) limit includes the Overall BZ TPY cap defined in (12) but does not authorize emissions of this constituent greater than its specified cap.

(9) The MSS VOC Cap (TPY) - A subcap within the Overall VOC Cap (TPY), applicable only to the annual VOC emissions from ( a) the standing idle, re-filling and de-gassing periods of the roof landing operations conducted for any combination of IFR vessels authorized by this permit, and ( b) the flares used to control these emissions. The MSS VOC (TPY) limit includes the MSS BZ TPY cap defined in (13) but does not authorize emissions of this constituent greater than its specified cap.

***Benzene Emission Caps:***

(10) Overall BZ Cap (lb/hr) - Applicable only to the hourly benzene emissions from the routine operations of the permitted sources for which no individual emission rate is specified by this permit.

(11) The MSS BZ Cap (lb/hr) - Separate from the Overall BZ Cap (lb./hr.), applicable only to the total benzene emissions from the standing idle, re-filling, and de-gassing periods of the roof landing operations conducted for any combination of IFR vessels authorized by this permit. The maximum allowable emission rate value (59.82 lb/hr) of the MSS BZ lb/hr cap is based on this compound's worst-case emission scenario.

(12) Overall BZ Cap (TPY) - Applicable only to the annual benzene emissions from ( a) the routine operations of the permitted sources for which no individual emission rate is specified by this permit, and (b) the MSS operations included in the MSS BZ Cap (TPY).

(13) The MSS BZ Cap (TPY) - A subcap within the Overall BZ Cap (TPY), applicable only to the annual benzene emissions from (a) the standing idle, re-filling and de-gassing periods of the roof landing operations conducted for any combination of IFR vessels authorized by this permit, and ( b) the flares used to control these emissions.

EMISSION SOURCES - EMISSIONS CAPS AND INDIVIDUAL EMISSION LIMITATIONS

(14) This emission source has been consolidated into Flexible Permit No. 5631 as prescribed in the TCEQ Interoffice Memorandum dated September 26, 2006.

* Emission Rates Are Based on and the Facilities Are Limited by the Following Maximum Operating Schedule:

Hrs/day ___ Days/week ____ Weeks/year ____ or Hrs/year 8,760

Date February 10, 2009