

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 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.

## AIR CONTAMINANTS DATA

| Emission<br>Point No. (1)  | Source<br>Name (2) | Name (3) | Air Contaminant<br>lb/hr TPY | <u>Emission Rates *</u> |
|--|--------------------|----------|------------------------------|-------------------------|
| <b><u>Tank Farm</u></b>  |                    |          |                              |                         |
| 300-1, 300-2,<br>300-3, 300-4,<br>80-7, 300-21, 300-22,<br>C80-1, C80-2, C80-3, C80-4,<br>B30-9, B30-10, B30-11,<br>B30-12, and C30-13 | Tanks **           |          | VOC<br>BZ                    | 75.00<br>2.53           |
| 300-1  | Tank               |          | VOC<br>BZ                    | 8.30<br>0.35            |
| 300-2  | Tank               |          | VOC<br>BZ                    | 4.81<br>0.21            |
| 300-3  | Tank               |          | VOC<br>BZ                    | 8.30<br>0.35            |
| 300-4  | Tank               |          | VOC<br>BZ                    | 8.30<br>0.35            |
| 80-7   | Tank               |          | VOC<br>BZ                    | 3.52<br>0.15            |
| 300-21   | Tank               |          | VOC<br>BZ                    | 7.35<br>0.31            |
| 300-22   | Tank               |          | VOC<br>BZ                    | 7.35<br>0.31            |
| C80-1  | Tank               |          | VOC                          | 25.19                   |

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

### AIR CONTAMINANTS DATA

| Emission<br>Point No. (1)   | Source<br>Name (2) | Air Contaminant<br>Name (3) | <u>Emission Rates *</u> |       |
|---|--------------------|-----------------------------|-------------------------|-------|
|   |                    |                             | lb/hr                   | TPY   |
| C80-2   | Tank               |                             | VOC                     | 25.19 |
| C80-3   | Tank               |                             | VOC                     | 4.34  |
|   |                    |                             | BZ                      | 0.19  |
| C80-4   | Tank               |                             | VOC                     | 4.34  |
|   |                    |                             | BZ                      | 0.19  |
| B30-9   | Tank               |                             | VOC                     | 18.80 |
| B30-10  | Tank               |                             | VOC                     | 18.80 |
| B30-11  | Tank               |                             | VOC                     | 3.18  |
|   |                    |                             | BZ                      | 0.14  |
| B30-12  | Tank               |                             | VOC                     | 3.18  |
|   |                    |                             | BZ                      | 0.14  |
| C30-13  | Tank               |                             | VOC                     | 18.80 |
| 150-40, 150-41,<br>150-42, 80-43,<br>80-44, 80-45, 80-46,<br>27-14, and 27-15 | Tanks ***          |                             | VOC                     | 22.85 |
|   |                    |                             | BZ                      | 0.76  |
| 150-40  | Tank               |                             | VOC                     | 2.29  |
|   |                    |                             | BZ                      | 0.12  |
| 150-41  | Tank               |                             | VOC                     | 2.29  |
|   |                    |                             | BZ                      | 0.12  |
| 150-42  | Tank               |                             | VOC                     | 2.29  |
|   |                    |                             | BZ                      | 0.12  |
| 80-43   | Tank               |                             | VOC                     | 2.27  |

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

| Emission<br>Point No. (1) | Source<br>Name (2)            | Air Contaminant<br>Name (3) | <u>Emission Rates *</u> |       |      |
|---------------------------|-------------------------------|-----------------------------|-------------------------|-------|------|
|                           |                               |                             | lb/hr                   | TPY   |      |
|                           |                               |                             | BZ                      | 0.15  |      |
| 80-44                     | Tank                          |                             | VOC                     | 2.27  |      |
|                           |                               |                             | BZ                      | 0.15  |      |
| 80-45                     | Tank                          |                             | VOC                     | 2.27  |      |
|                           |                               |                             | BZ                      | 0.15  |      |
| 80-46                     | Tank                          |                             | VOC                     | 2.27  |      |
|                           |                               |                             | BZ                      | 0.15  |      |
| 27-14                     | Tank                          |                             | VOC                     | 1.60  |      |
|                           |                               |                             | BZ                      | 0.10  |      |
| 27-15                     | Tank                          |                             | VOC                     | 1.60  |      |
|                           |                               |                             | BZ                      | 0.10  |      |
| 100-47                    | Tank                          |                             | VOC                     | 2.12  | 2.66 |
|                           |                               |                             | BZ                      | 0.13  | 0.09 |
| 100-48                    | Tank                          |                             | VOC                     | 2.12  | 2.66 |
|                           |                               |                             | BZ                      | 0.13  | 0.09 |
| 100-49                    | Tank                          |                             | VOC                     | 2.12  | 2.66 |
|                           |                               |                             | BZ                      | 0.13  | 0.09 |
| 80-12                     | Tank                          |                             | VOC                     | 2.22  | 2.48 |
|                           |                               |                             | BZ                      | 0.15  | 0.08 |
| FUG 100                   | 100 Manifold<br>Fugitives (4) |                             | VOC                     | 0.28  | 1.23 |
|                           |                               |                             | BZ                      | 0.03  | 0.12 |
| FUG B                     | B Manifold Fugitives (4)      |                             | VOC                     | 0.05  | 0.24 |
|                           |                               |                             | BZ                      | 0.005 | 0.02 |
| FUG C                     | C Manifold Fugitives (4)      |                             | VOC                     | 0.16  | 0.69 |

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

### AIR CONTAMINANTS DATA

| Emission<br>Point No. (1) | Source<br>Name (2) | Air Contaminant<br>Name (3) | Emission Rates * |      |  |      |
|---------------------------|--------------------|-----------------------------|------------------|------|--|------|
|                           |                    |                             | lb/hr            | TPY  |  |      |
|                           |                    |                             | BZ               | 0.02 |  | 0.07 |
| FUG D                     |                    | D Manifold Fugitives (4)    | VOC              | 0.23 |  | 1.00 |
|                           |                    |                             | BZ               | 0.02 |  | 0.10 |

### Boilers and Turbines

|     |        |                 |      |       |
|-----|--------|-----------------|------|-------|
| S-1 | Boiler | VOC             | 0.10 | 0.40  |
|     |        | NO <sub>x</sub> | 4.00 | 17.30 |
|     |        | CO              | 1.00 | 4.30  |
|     |        | PM              | 0.10 | 0.60  |
|     |        | SO <sub>2</sub> | 0.02 | 0.07  |

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

| Emission<br>Point No. (1) | Source<br>Name (2)                 | Air Contaminant<br>Name (3) | Emission Rates * |       |
|---------------------------|------------------------------------|-----------------------------|------------------|-------|
|                           |                                    |                             | lb/hr            | TPY   |
| S-4                       | Boiler                             | VOC                         | 0.14             | 0.61  |
|                           |                                    | NO <sub>x</sub>             | 15.45            | 67.67 |
|                           |                                    | CO                          | 4.01             | 17.55 |
|                           |                                    | PM                          | 0.50             | 2.19  |
|                           |                                    | SO <sub>2</sub>             | 0.06             | 0.26  |
| S-7                       | IBW Gas-Fired Boiler<br>73.4 MMBtu | VOC                         | 0.32             | 1.42  |
|                           |                                    | NO <sub>x</sub>             | 3.67             | 16.08 |
|                           |                                    | CO                          | 2.79             | 12.22 |
|                           |                                    | PM                          | 0.37             | 1.61  |
|                           |                                    | SO <sub>2</sub>             | 0.04             | 0.19  |
| S-8                       | IBW Gas-Fired Boiler<br>73.4 MMBtu | VOC                         | 0.32             | 1.42  |
|                           |                                    | NO <sub>x</sub>             | 3.67             | 16.08 |
|                           |                                    | CO                          | 2.79             | 12.22 |
|                           |                                    | PM                          | 0.37             | 1.61  |
|                           |                                    | SO <sub>2</sub>             | 0.04             | 0.19  |
| 500                       | Gas Turbine<br>(Allison 501-KB)    | VOC                         | 0.22             | 0.9   |
|                           |                                    | NO <sub>x</sub>             | 8.5              | 35.0  |
|                           |                                    | CO                          | 6.2              | 27.16 |
|                           |                                    | PM                          | 0.18             | 0.80  |
|                           |                                    | SO <sub>2</sub>             | 0.02             | 0.1   |

**Loading Flares**

|     |       |                 |      |       |
|-----|-------|-----------------|------|-------|
| S-5 | Flare | VOC             |      | 11.70 |
| S-6 | Flare | VOC             | 3.00 | 8.20  |
|     |       | BZ              | 0.13 | 0.28  |
|     |       | NO <sub>x</sub> | 0.20 | 0.50  |
|     |       | CO              | 1.50 | 4.20  |

**Marine Loading**

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

|                                       |                               |                 |        |        |
|---------------------------------------|-------------------------------|-----------------|--------|--------|
| MLF-1                                 | Flare                         | VOC             | 90.0   | 36.00  |
|                                       |                               | BZ              | 2.0    | 1.22   |
|                                       |                               | NO <sub>x</sub> | 11.4   | 4.06   |
|                                       |                               | CO              | 45.4   | 16.13  |
| SD-1, SD-4,<br>SD-5, BD-B<br>and BD-D | Dock Fugitives (4) ****       | VOC             |        | 103.00 |
|                                       |                               | BZ              |        | 3.48   |
| SD-1                                  | Ship Dock 1<br>Fugitives (4)  | VOC             | 823.20 |        |
|                                       |                               | BZ              | 11.64  |        |
| SD-4                                  | Ship Dock 4<br>Fugitives (4)  | VOC             | 823.20 |        |
|                                       |                               | BZ              | 11.64  |        |
| SD-5                                  | Ship Dock 5<br>Fugitives (4)  | VOC             | 823.20 |        |
|                                       |                               | BZ              | 11.64  |        |
| BD-B                                  | Barge Dock B<br>Fugitives (4) | VOC             | 191.84 |        |
|                                       |                               | BZ              | 4.56   |        |
| BD-D                                  | Barge Dock D<br>Fugitives (4) | VOC             | 212.20 |        |

- (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 General Rule 101.1
- NO<sub>x</sub> - total oxides of nitrogen
- CO - carbon monoxide
- PM - particulate matter
- SO<sub>2</sub> - sulfur dioxide
- BZ - benzene

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

(4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

- \* 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

- \*\* The combined annual emission rate for these tanks shall not exceed 75 TPY of VOC and 2.53 TPY of BZ.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

- \*\*\* The combined annual emission rate for these tanks shall not exceed 22.85 TPY of VOC and 0.76 TPY of BZ.
  
- \*\*\*\* The combined annual emission rate for the loading docks shall not exceed 103.0 TPY VOC and 3.48 TPY of BZ.

Dated \_\_\_\_\_