### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number: 49134

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      | Source                   |   | Air Contaminant                                  | <b>Emission</b>                        | Rates * |
|---------------|--------------------------|---|--|--|---------|
| Point No. (1) | Name (2)                 |   | Name (3)   | lb/hr                                  | TPY**   |
| 37FUG_001     | Duosol Fugitive Area     |   | VOC  | 6.28                                   | 27.51   |
| 37TFX_0364    | Storage Vessel 364       |   | VOC  | 0.26                                   | <0.01   |
| 37STK_001     | Extract Heater N4/P4     | SO <sub>2</sub><br>NO <sub>x</sub><br>CO<br>VOC | PM <sub>10</sub><br>0.26<br>0.98<br>0.79<br>0.05 | 0.07<br>1.12<br>4.29<br>3.46<br>0.23   | 0.32    |
| 37VNT_001     | N4 Vacuum Eductor Vent   |   | VOC  | <0.01                                  | <0.01   |
| 37VNT_002     | P4 Vacuum Eductor Vent   |   | VOC  | <0.01                                  | <0.01   |
| 38FUG_001     | Furfural 1 Fugitive Area |   | VOC  | 4.79                                   | 20.97   |
| 38CLT_009     | Cooling Tower No. 9 (5)  |   | VOC  | 1.16                                   | 5.06    |
| 38VNT_001     | Furfural 1 Condenser Ven | t   | VOC  | 0.68                                   | 2.99    |
| 38STK_001     | Extract Heater B-1/B-2   | SO <sub>2</sub><br>NO <sub>x</sub><br>CO<br>VOC | PM <sub>10</sub><br>0.89<br>3.40<br>2.75<br>0.18 | 0.26<br>3.32<br>12.70<br>10.23<br>0.69 | 0.95    |
| 38STK_002     | Extract Heater B2-A      | SO <sub>2</sub><br>NO <sub>x</sub><br>CO<br>VOC | PM <sub>10</sub><br>0.65<br>2.50<br>2.02<br>0.14 | 0.19<br>2.45<br>9.37<br>7.55<br>0.51   | 0.70    |
| 39FUG_001     | Furfural 2 Fugitive Area |   | VOC  | 6.11                                   | 26.75   |

### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

### AIR CONTAMINANTS DATA

| Emission      | Source                    | Air   | Contaminant                                      | Emission                               | Rates * |
|---------------|---------------------------|---|--|--|---------|
| Point No. (1) | Name (2)                  |   | Name (3)   | lb/hr                                  | TPY**   |
|               |                           |   |  |  |         |
| 39CLT_008     | Cooling Tower No. 8 (5)   |   | VOC  | 0.30                                   | 1.32    |
| 39VNT_001     | Furfural 2 Condenser Ven  | t   | VOC  | 0.43                                   | 1.89    |
| 39STK_001     | Extract Heater BA-1/BA-2  | SO <sub>2</sub><br>NO <sub>x</sub><br>CO<br>VOC | PM <sub>10</sub><br>1.59<br>6.83<br>4.94<br>0.33 | 0.46<br>6.40<br>27.47<br>19.75<br>1.33 | 1.84    |
| 38VNT_002     | Furfural 1 Deaerator Vent |   | VOC  | 0.01                                   | 0.02    |
| 39VNT_002     | Furfural 2 Deaerator Vent |   | VOC  | 0.01                                   | 0.04    |
| 37TFX_4099    | Storage Vessel N5         |   | VOC  | 4.96                                   | <0.01   |
| 39STK_002     | Extract Heater B-103      | SO <sub>2</sub><br>NO <sub>x</sub><br>CO<br>VOC | PM <sub>10</sub><br>0.39<br>1.50<br>1.21<br>0.08 | 0.11<br>1.53<br>5.86<br>4.73<br>0.32   | 0.44    |
| 37TFX_0483    | Storage Vessel 483        |   | VOC  | 0.15                                   | <0.01   |
| 37TFX_4027    | Storage Vessel 4027       |   | VOC  | <0.01                                  | <0.01   |
| 38TFX4032     | Storage Vessel 4032       |   | VOC  | 8.84                                   | 0.02    |
| 38TFX_4033    | Storage Vessel 4033       |   | VOC  | 8.84                                   | 0.01    |
| 38VNT_003     | Sump 4086                 |   | VOC  | 0.01                                   | <0.01   |
| 38TFX_4090    | Storage Vessel F14        |   | VOC  | 8.83                                   | 0.02    |

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

### AIR CONTAMINANTS DATA

| Emission      | Source              | Air Contaminant | Emission | Rates * |
|---------------|---------------------|-----------------|----------|---------|
| Point No. (1) | Name (2)            | Name (3)        | lb/hr    | TPY**   |
| 39TFX_4036    | Storage Vessel 4036 | VOC             | 5.31     | 0.02    |
| 39VNT_003     | Sump F7             | VOC             | 0.09     | <0.01   |
| 44TFX_2198    | Lube Tank # 2198    | VOC             | 0.04     | 0.05    |
| 44TFX_2199    | Lube Tank # 2199    | VOC             | 0.04     | 0.05    |
| 44TFX_0350    | Lube Tank # 350     | VOC             | 0.02     | <0.01   |
| 44TFX_0410    | Lube Tank # 410     | VOC             | 0.02     | <0.01   |
| 44TFX_0560    | Lube Tank # 560     | VOC             | 0.06     | 0.01    |
| 44TFX_0569    | Lube Tank # 569     | VOC             | 0.07     | 0.01    |
| 44TFX_0570    | Lube Tank # 570     | VOC             | 0.07     | 0.01    |
| 44TFX_0577    | Lube Tank # 577     | VOC             | 0.07     | 0.01    |
| 44TFX_0580    | Lube Tank # 580     | VOC             | 0.06     | 0.02    |
| 44TFX_0582    | Lube Tank # 582     | VOC             | 0.03     | <0.01   |
| 44TFX_0583    | Lube Tank # 583     | VOC             | 0.06     | 0.02    |
| 44TFX_0584    | Lube Tank # 584     | VOC             | 0.03     | 0.01    |
| 44TFX_0585    | Lube Tank # 585     | VOC             | 0.03     | 0.01    |
| 44TFX_0652    | Lube Tank # 652     | VOC             | 1.26     | 0.02    |
| 44TFX_0697    | Lube Tank # 697     | VOC             | 0.06     | <0.01   |
| 44TFX_0698    | Lube Tank # 698     | VOC             | 0.07     | <0.01   |

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES AIR CONTAMINANTS DATA

| Emission      | Source           | Air Contaminant | <u>Emission</u> | Rates * |
|---------------|------------------|-----------------|-----------------|---------|
| Point No. (1) | Name (2)         | Name (3)        | lb/hr           | TPY**   |
|               |                  |                 |                 |         |
| 44TFX_0722    | Lube Tank # 722  | VOC             | 0.03            | <0.01   |
| 44TFX_0746    | Lube Tank # 746  | VOC             | 0.03            | 0.01    |
| 44TFX_0748    | Lube Tank # 748  | VOC             | <0.01           | <0.01   |
| 44TFX_0749    | Lube Tank # 749  | VOC             | <0.01           | <0.01   |
| 44TFX_0792    | Lube Tank # 792  | VOC             | 0.02            | 0.01    |
| 44TFX_0798    | Lube Tank # 798  | VOC             | 0.06            | 0.02    |
| 44TFX_1106    | Lube Tank # 1106 | VOC             | 0.03            | 0.03    |
| 44TFX_1107    | Lube Tank # 1107 | VOC             | 0.03            | 0.03    |
| 44TFX_1110    | Lube Tank # 1110 | VOC             | 0.03            | <0.01   |
| 44TFX_1111    | Lube Tank # 1111 | VOC             | 0.03            | 0.01    |
| 44TFX_1112    | Lube Tank # 1112 | VOC             | 0.03            | 0.01    |
| 44TFX_1114    | Lube Tank # 1114 | VOC             | 0.03            | 0.03    |
| 44TFX_1118    | Lube Tank # 1118 | VOC             | 0.01            | 0.01    |
| 44TFX_1119    | Lube Tank # 1119 | VOC             | 0.03            | 0.01    |
| 44TFX_1120    | Lube Tank # 1120 | VOC             | 0.06            | 0.01    |
| 44TFX_1121    | Lube Tank # 1121 | VOC             | 0.06            | <0.01   |
| 44TFX_1130    | Lube Tank # 1130 | VOC             | <0.01           | <0.01   |

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

### AIR CONTAMINANTS DATA

| Emission      | Source           | Air Contaminant | Emission | Rates * |
|---------------|------------------|-----------------|----------|---------|
| Point No. (1) | Name (2)         | Name (3)        | lb/hr    | TPY**   |
| 44TFX_1133    | Lube Tank # 1133 | VOC             | 0.03     | <0.01   |
| 44TFX_1134    | Lube Tank # 1134 | VOC             | 0.03     | <0.01   |
| 44TFX_1135    | Lube Tank # 1135 | VOC             | 0.03     | 0.01    |
| 44TFX_1136    | Lube Tank # 1136 | VOC             | 0.03     | 0.01    |
| 44TFX_1154    | Lube Tank # 1154 | VOC             | 0.06     | <0.01   |
| 44TFX_1155    | Lube Tank # 1155 | VOC             | 0.06     | <0.01   |
| 44TFX_1156    | Lube Tank # 1156 | VOC             | 0.06     | <0.01   |
| 44TFX_1168    | Lube Tank # 1168 | VOC             | <0.01    | 0.01    |
| 44TFX_1169    | Lube Tank # 1169 | VOC             | <0.01    | 0.01    |
| 44TFX_1170    | Lube Tank # 1170 | VOC             | 0.01     | <0.01   |
| 44TFX_1171    | Lube Tank # 1171 | VOC             | 0.01     | <0.01   |
| 44TFX_1172    | Lube Tank # 1172 | VOC             | 0.01     | <0.01   |
| 44TFX_1176    | Lube Tank # 1176 | VOC             | 0.06     | <0.01   |
| 44TFX_1177    | Lube Tank # 1177 | VOC             | 0.06     | <0.01   |
| 44TFX_1178    | Lube Tank # 1178 | VOC             | 0.01     | <0.01   |
| 44TFX_1179    | Lube Tank # 1179 | VOC             | 0.01     | <0.01   |
| 44TFX_1180    | Lube Tank # 1180 | VOC             | 0.03     | <0.01   |
| 44TFX_1183    | Lube Tank # 1183 | VOC             | 0.01     | <0.01   |

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES AIR CONTAMINANTS DATA

| Emission      | Source           | Air Contaminant | <u>Emission</u> | Rates * |
|---------------|------------------|-----------------|-----------------|---------|
| Point No. (1) | Name (2)         | Name (3)        | lb/hr           | TPY**   |
|               |                  |                 |                 |         |
| 44TFX_1184    | Lube Tank # 1184 | VOC             | 0.01            | <0.01   |
| 44TFX_1186    | Lube Tank # 1186 | VOC             | 0.01            | <0.01   |
| 44TFX_1187    | Lube Tank # 1187 | VOC             | 0.03            | <0.01   |
| 44TFX_1188    | Lube Tank # 1188 | VOC             | 0.03            | <0.01   |
| 44TFX_1193    | Lube Tank # 1193 | VOC             | 0.03            | <0.01   |
| 44TFX_1194    | Lube Tank # 1194 | VOC             | <0.01           | <0.01   |
| 44TFX_1197    | Lube Tank # 1197 | VOC             | 0.03            | <0.01   |
| 44TFX_1198    | Lube Tank # 1198 | VOC             | 0.06            | <0.01   |
| 44TFX_1199    | Lube Tank # 1199 | VOC             | 0.06            | <0.01   |
| 44TFX_1200    | Lube Tank # 1200 | VOC             | 0.06            | <0.01   |
| 44TFX_1201    | Lube Tank # 1201 | VOC             | 0.06            | <0.01   |
| 44TFX_1202    | Lube Tank # 1202 | VOC             | 0.03            | <0.01   |
| 44TFX_1203    | Lube Tank # 1203 | VOC             | 0.03            | <0.01   |
| 44TFX_1204    | Lube Tank # 1204 | VOC             | <0.01           | <0.01   |
| 44TFX_1205    | Lube Tank # 1205 | VOC             | 0.06            | <0.01   |
| 44TFX_1206    | Lube Tank # 1206 | VOC             | 0.06            | <0.01   |
| 44TFX_1207    | Lube Tank # 1207 | VOC             | 0.04            | <0.01   |

### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

### AIR CONTAMINANTS DATA

| Emission      | Source           | Air Contaminant | Emission | Rates * |
|---------------|------------------|-----------------|----------|---------|
| Point No. (1) | Name (2)         | Name (3)        | lb/hr    | TPY**   |
| 44TFX_1208    | Lube Tank # 1208 | VOC             | 0.04     | <0.01   |
| 44TFX_1209    | Lube Tank # 1209 | VOC             | 0.04     | <0.01   |
| 44TFX_1210    | Lube Tank # 1210 | VOC             | 0.04     | <0.01   |
| 44TFX_1211    | Lube Tank # 1211 | VOC             | 0.04     | <0.01   |
| 44TFX_1224    | Lube Tank # 1224 | VOC             | 0.03     | 0.01    |
| 44TFX_1226    | Lube Tank # 1226 | VOC             | 0.01     | <0.01   |
| 44TFX_1227    | Lube Tank # 1227 | VOC             | 0.01     | <0.01   |
| 44TFX_1232    | Lube Tank # 1232 | VOC             | 0.31     | 0.04    |
| 44TFX_1262    | Lube Tank # 1262 | VOC             | 0.03     | 0.01    |
| 44TFX_1264    | Lube Tank # 1264 | VOC             | 0.01     | 0.01    |
| 44TFX_1273    | Lube Tank # 1273 | VOC             | 0.01     | <0.01   |
| 44TFX_1278    | Lube Tank # 1278 | VOC             | 0.06     | <0.01   |
| 44TFX_1279    | Lube Tank # 1279 | VOC             | 0.06     | 0.01    |
| 44TFX_1280    | Lube Tank # 1280 | VOC             | 0.01     | 0.01    |
| 44TFX_1282    | Lube Tank # 1282 | VOC             | 0.01     | 0.01    |
| 44TFX_1283    | Lube Tank # 1283 | VOC             | 0.03     | 0.01    |
| 44TFX_1285    | Lube Tank # 1285 | VOC             | 0.06     | 0.01    |
| 44TFX_1286    | Lube Tank # 1286 | VOC             | 0.01     | 0.01    |

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES AIR CONTAMINANTS DATA

| Emission      | Source           | Air Contaminant | Emission | Rates * |
|---------------|------------------|-----------------|----------|---------|
| Point No. (1) | Name (2)         | Name (3)        | lb/hr    | TPY**   |
|               |                  |                 |          |         |
| 44TFX_1287    | Lube Tank # 1287 | VOC             | 0.06     | 0.01    |
| 44TFX_1288    | Lube Tank # 1288 | VOC             | 0.06     | 0.01    |
| 44TFX_1289    | Lube Tank # 1289 | VOC             | 0.06     | 0.01    |
| 44TFX_1290    | Lube Tank # 1290 | VOC             | 0.06     | 0.01    |
| 44TFX_1292    | Lube Tank # 1292 | VOC             | 0.01     | <0.01   |
| 44TFX_1293    | Lube Tank # 1293 | VOC             | 0.01     | <0.01   |
| 44TFX_1328    | Lube Tank # 1328 | VOC             | 0.06     | 0.02    |
| 44TFX_1368    | Lube Tank #1368  | VOC             | 0.06     | 0.02    |
| 44TFX_1369    | Lube Tank # 1369 | VOC             | 0.06     | 0.02    |
| 44TFX_1370    | Lube Tank # 1370 | VOC             | 0.01     | 0.01    |
| 44TFX_1371    | Lube Tank # 1371 | VOC             | 0.01     | <0.01   |
| 44TFX_1382    | Lube Tank # 1382 | VOC             | 0.01     | <0.01   |
| 44TFX_1386    | Lube Tank # 1386 | VOC             | 0.01     | <0.01   |
| 44TFX_1393    | Lube Tank # 1393 | VOC             | 0.03     | 0.01    |
| 44TFX_2100    | Lube Tank # 2100 | VOC             | 0.04     | <0.01   |
| 44TFX_2101    | Lube Tank # 2101 | VOC             | 0.02     | <0.01   |
| 44TFX_2106    | Lube Tank # 2106 | VOC             | 0.02     | 0.01    |

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

### AIR CONTAMINANTS DATA

| Emission      | Source                     | Air Contaminant | Emission | Rates * |
|---------------|----------------------------|-----------------|----------|---------|
| Point No. (1) | Name (2)                   | Name (3)        | lb/hr    | TPY**   |
| 44TFX_2124    | Lube Tank # 2124           | VOC             | 0.03     | 0.02    |
| 44TFX_2125    | Lube Tank # 2125           | VOC             | 0.03     | 0.02    |
| 44TFX_2128    | Lube Tank # 2128           | VOC             | 0.03     | 0.02    |
| 44TFX_2145    | Lube Tank # 2145           | VOC             | 0.02     | 0.01    |
| 44TFX_2146    | Lube Tank # 2146           | VOC             | 0.02     | 0.01    |
| 44TFX_2147    | Lube Tank # 2147           | VOC             | 0.02     | 0.01    |
| 44TFX_2183    | Lube Tank # 2183           | VOC             | 0.61     | 0.02    |
| 44TFX_2184    | Lube Tank # 2184           | VOC             | 0.61     | 0.02    |
| 44TFX_2185    | Lube Tank # 2185           | VOC             | 0.04     | 0.03    |
| 44TFX_2186    | Lube Tank # 2186           | VOC             | 0.04     | 0.01    |
| 44TFX_2196    | Lube Tank # 2196           | VOC             | 0.03     | <0.01   |
| 44TFX_2222    | Lube Tank # 2222           | VOC             | 0.04     | 0.05    |
| 44TFX_2234    | Lube Tank # 2234           | VOC             | 0.04     | 0.01    |
| 44TIF_1294    | Lube Tank # 1294           | VOC             | 0.17     | 0.38    |
| 44TIF_1295    | Lube Tank # 1295           | VOC             | 0.16     | 0.13    |
| 44TIF_1296    | Lube Tank # 1296           | VOC             | 0.19     | 0.34    |
| 44FUG_001     | Lube Tank Farm Fugitives   | VOC             | 5.37     | 23.53   |
| 44LRA_010     | Railcar/Tank Truck Loading | VOC             | 3.83     | 0.09    |

### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

#### AIR CONTAMINANTS DATA

| Emission      | Source                               | Air Contaminant | <u>Emissior</u> | n Rates * |
|---------------|--------------------------------------|-----------------|-----------------|-----------|
| Point No. (1) | Name (2)                             | Name (3)        | lb/hr           | TPY**     |
|               | Rack 10                              |                 |                 |           |
| 44LRA_002     | Railcar/Tank Truck Loading<br>Rack 2 | VOC             | 3.83            | 0.12      |

- (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 30 Texas Administrative Code Section 101.1

NO<sub>x</sub> - total oxides of nitrogen

SO<sub>2</sub> - sulfur dioxide

 $PM_{10}\,\,$  - 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.

CO - carbon monoxide

- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) These emission rates are not in effect until September 1, 2006.
- \* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

| Hrs/dayDays/weekWeeks/year or 8760 Hrs/ye | ar |
|---|----|
|---|----|

<sup>\*\*</sup> Compliance with annual emission limits is based on a rolling 12-month period.