### EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

#### Permit Number 47091

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 _ | Emission Rates * |       |
|---------------|---------------------|-----|---------------|------------------|-------|
| Point No. (1) | Name (2)            |     | Name (3)      | lb/hr            | TPY** |
| 125           | MEA Column Jet Vent |     | MEA           | 0.01             | 0.01  |
| 126           | MEA Stripper Column |     | MEA           | 0.01             | 0.01  |
| 127           | DEA Column Jet Vent |     | DEA           | 0.01             | 0.01  |
| 131           | Ammonia Flare       | NOx | NH₃<br>0.72   | 1.43<br>3.14     | 6.28  |
| 294           | TEA Column Jet Vent | TEA | DEA<br>0.01   | 0.01<br>0.01     | 0.01  |
| 120-1         | Tank 3600           |     | MEA           | 0.01             | 0.15  |
| 120-3         | Tank 3601           |     | MEA           | 0.03             | 0.14  |
| 120-5         | Tank 3603           |     | DEA           | 0.01             | 0.01  |
| 120-7         | Tank 3605           | TEA | DEA<br>0.01   | 0.01<br>0.01     | 0.01  |
| 120-9         | Tank 3607           | TEA | DEA<br>0.01   | 0.01<br>0.01     | 0.01  |
| 120-11        | Tank 3609           |     | DEA           | 0.01             | 0.01  |
| 120-2         | Tank 3700           |     | MEA           | 0.03             | 0.14  |
| 120-4         | Tank 3701           |     | MEA           | 0.03             | 0.14  |

# EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

# AIR CONTAMINANTS DATA

| Emission<br>*                | Source                 | Air        | Contaminant                    | <u>Emission</u>      | Rates        |  |  |
|------------------------------|------------------------|------------|--------------------------------|----------------------|--------------|--|--|
| Point No. (1)                | Name (2)               |            | Name (3)                       | lb/hr                | TPY**        |  |  |
|                              |                        |            |                                |                      |              |  |  |
| 120-6                        | Tank 3703              |            | DEA                            | 0.01                 | 0.01         |  |  |
| 120-13                       | Tank 3704              | TEA        | DEA<br>0.01                    | 0.01<br>0.01         | 0.01         |  |  |
| 120-8                        | Tank 3705              | TEA        | DEA<br>0.01                    | 0.01<br>0.01         | 0.01         |  |  |
| 120-10                       | Tank 3707              | TEA        | DEA<br>0.01                    | 0.01<br>0.01         | 0.01         |  |  |
| 210-12                       | Tank 3709              |            | DEA                            | 0.01                 | 0.01         |  |  |
| 645                          | Fugitives              | NH₃<br>MEA | Ethylene oxide<br>0.73<br>1.18 | 0.32<br>3.21<br>5.16 | 1.42         |  |  |
| RCTYK                        | Amines Recycle<br>Tank | TEA        | MEA<br>DEA<br>0.01             | 0.01<br>0.01<br>0.01 | 0.03<br>0.01 |  |  |
| STARTUP/SHUTDOWN/MAINTENANCE |                        |            |                                |                      |              |  |  |
| 131                          | Ammonia Flare          | NOx        | NH <sub>3</sub><br>6.7         | 13.33<br>0.0175      | 0.035        |  |  |

<sup>(1)</sup> Emission point identification - either specific equipment designation or emission point number from a plot plan.

MEA - monoethanolamine

DEA - diethanolamine

<sup>(2)</sup> Specific point source names. For fugitive sources, use an area name or fugitive source name.

<sup>(3)</sup> VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code Section 101.1

TEA - triethanolamine

NH3 - ammonia

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

Permit Number 47091 Page 3

### 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:
- 24 Hrs/day 7 Days/week 52 Weeks/year
- \*\* Compliance with annual emission limits is based on a rolling 12-month period.

Dated February 27, 2002