

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit No. 6818A

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)         | Air Contaminant<br>Name (3) | Emission Rates * |         |
|---------------------------|----------------------------|-----------------------------|------------------|---------|
|                           |                            |                             | lb/hr            | TPY     |
| 5                         | Glycol Regenerator         | PM <sub>10</sub>            | 0.0085           | 0.0373  |
|                           |                            | VOC                         | 0.0027           | 0.0119  |
|                           |                            | CO                          | 0.0149           | 0.0653  |
|                           |                            | NO <sub>x</sub>             | 0.0710           | 0.3110  |
|                           |                            | SO <sub>2</sub>             | 0.0004           | 0.0019  |
| DEHY-3                    | Glycol Regenerator<br>Vent | nm-VOC                      | 0.1640           | 0.7182  |
|                           |                            | H <sub>2</sub> S            | 0.0677           | 0.2965  |
|                           |                            | Benzene                     | 0.2027           | 0.8876  |
|                           |                            | Toluene                     | 0.4824           | 2.1127  |
|                           |                            | Ethylbenzene                | 0.8159           | 3.5736  |
|                           |                            | Xylene                      | 0.9654           | 4.2286  |
|                           |                            | n-Hexane                    | 0.0188           | 0.0823  |
| 12                        | Process Vent Stack         | H <sub>2</sub> S            | 3.6986           | 16.1999 |
|                           |                            | Hexane                      | 0.1187           | 0.5200  |
|                           |                            | Benzene                     | 0.7580           | 3.3200  |
|                           |                            | Toluene                     | 0.3744           | 1.6400  |
|                           |                            | Ethylbenzene                | 0.0114           | 0.0500  |
|                           |                            | Xylene                      | 0.2466           | 1.0800  |
| 13                        | Process Vent Stack         | H <sub>2</sub> S            | 5.5479           | 24.2998 |
|                           |                            | Hexane                      | 0.2534           | 1.1100  |
|                           |                            | Benzene                     | 1.6233           | 7.1100  |
|                           |                            | Toluene                     | 0.8014           | 3.5100  |
|                           |                            | Ethylbenzene                | 0.0274           | 0.1200  |
|                           |                            | Xylene                      | 0.5274           | 2.3100  |
| 14A                       | Amine Reboiler             | PM <sub>10</sub>            | 0.0457           | 0.2000  |
|                           |                            | VOC                         | 0.0093           | 0.0406  |
|                           |                            | CO                          | 0.1167           | 0.5110  |
|                           |                            | NO <sub>x</sub>             | 0.4667           | 2.0440  |
|                           |                            | SO <sub>2</sub>             | 0.0060           | 0.3000  |

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|---------------------------|--------------------|-----------------------------|------------------|--------|
|                           |                    |                             | lb/hr            | TPY    |
| 14B                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0457           | 0.2000 |
|                           |                    | VOC                         | 0.0093           | 0.0406 |
|                           |                    | CO                          | 0.1167           | 0.5110 |
|                           |                    | NO <sub>x</sub>             | 0.667            | 2.0440 |
|                           |                    | SO <sub>2</sub>             | 0.0060           | 0.3000 |
| 14C                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0457           | 0.2000 |
|                           |                    | VOC                         | 0.0093           | 0.0406 |
|                           |                    | CO                          | 0.1167           | 0.5110 |
|                           |                    | NO <sub>x</sub>             | 0.667            | 2.0440 |
|                           |                    | SO <sub>2</sub>             | 0.0060           | 0.3000 |
| 14D                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0258           | 0.1130 |
|                           |                    | VOC                         | 0.0082           | 0.0360 |
|                           |                    | CO                          | 0.0452           | 0.1978 |
|                           |                    | NO <sub>x</sub>             | 0.2150           | 0.9417 |
|                           |                    | SO <sub>2</sub>             | 0.0030           | 0.0130 |
| 14E                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0258           | 0.1130 |
|                           |                    | VOC                         | 0.0082           | 0.0360 |
|                           |                    | CO                          | 0.0452           | 0.1978 |
|                           |                    | NO <sub>x</sub>             | 0.2150           | 0.9417 |
|                           |                    | SO <sub>2</sub>             | 0.0030           | 0.0130 |
| 15A                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0288           | 0.1261 |
|                           |                    | VOC                         | 0.0092           | 0.0402 |
|                           |                    | CO                          | 0.0504           | 0.2208 |
|                           |                    | NO <sub>x</sub>             | 0.2400           | 1.0512 |
|                           |                    | SO <sub>2</sub>             | 0.0040           | 0.0190 |
| 15B                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0288           | 0.1261 |
|                           |                    | VOC                         | 0.0092           | 0.0402 |
|                           |                    | CO                          | 0.0504           | 0.2208 |
|                           |                    | NO <sub>x</sub>             | 0.2400           | 1.0512 |
|                           |                    | SO <sub>2</sub>             | 0.0040           | 0.0190 |

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| Emission<br>Point No. (1) | Source<br>Name (2) | Air Contaminant<br>Name (3) | Emission Rates * |        |
|---------------------------|--------------------|-----------------------------|------------------|--------|
|                           |                    |                             | lb/hr            | TPY    |
| 15C                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0288           | 0.1261 |
|                           |                    | VOC                         | 0.0092           | 0.0402 |
|                           |                    | CO                          | 0.0504           | 0.2208 |
|                           |                    | NO <sub>x</sub>             | 0.2400           | 1.0512 |
|                           |                    | SO <sub>2</sub>             | 0.0040           | 0.0190 |
| 16A                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0288           | 0.1261 |
|                           |                    | VOC                         | 0.0092           | 0.0402 |
|                           |                    | CO                          | 0.0504           | 0.2208 |
|                           |                    | NO <sub>x</sub>             | 0.2400           | 1.0512 |
|                           |                    | SO <sub>2</sub>             | 0.0040           | 0.0190 |
| 16B                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0288           | 0.1261 |
|                           |                    | VOC                         | 0.0092           | 0.0402 |
|                           |                    | CO                          | 0.0504           | 0.2208 |
|                           |                    | NO <sub>x</sub>             | 0.2400           | 1.0512 |
|                           |                    | SO <sub>2</sub>             | 0.0040           | 0.0190 |
| 16C                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0288           | 0.1261 |
|                           |                    | VOC                         | 0.0092           | 0.0402 |
|                           |                    | CO                          | 0.0504           | 0.2208 |
|                           |                    | NO <sub>x</sub>             | 0.2400           | 1.0512 |
|                           |                    | SO <sub>2</sub>             | 0.0040           | 0.0190 |
| 21A                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0288           | 0.1261 |
|                           |                    | VOC                         | 0.0092           | 0.0402 |
|                           |                    | CO                          | 0.0504           | 0.2208 |
|                           |                    | NO <sub>x</sub>             | 0.2400           | 1.0512 |
|                           |                    | SO <sub>2</sub>             | 0.0040           | 0.0190 |
| 21B                       | Amine Reboiler     | PM <sub>10</sub>            | 0.0288           | 0.1261 |
|                           |                    | VOC                         | 0.0092           | 0.0402 |
|                           |                    | CO                          | 0.0504           | 0.2208 |
|                           |                    | NO <sub>x</sub>             | 0.2400           | 1.0512 |
|                           |                    | SO <sub>2</sub>             | 0.0040           | 0.0190 |

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| Emission<br>Point No. (1) | Source<br>Name (2)           | Air Contaminant<br>Name (3) | Emission Rates * |        |
|---------------------------|------------------------------|-----------------------------|------------------|--------|
|                           |                              |                             | lb/hr            | TPY    |
| 21C                       | Amine Reboiler               | PM <sub>10</sub>            | 0.0288           | 0.1261 |
|                           |                              | VOC                         | 0.0092           | 0.0402 |
|                           |                              | CO                          | 0.0504           | 0.2208 |
|                           |                              | NO <sub>x</sub>             | 0.2400           | 1.0512 |
|                           |                              | SO <sub>2</sub>             | 0.0040           | 0.0190 |
| 28                        | Glycol Regenerator<br>Burner | PM <sub>10</sub>            | 0.0120           | 0.0526 |
|                           |                              | VOC                         | 0.0038           | 0.0168 |
|                           |                              | CO                          | 0.0210           | 0.0920 |
|                           |                              | NO <sub>x</sub>             | 0.1000           | 0.4380 |
|                           |                              | SO <sub>2</sub>             | 0.0006           | 0.0030 |
| DEHY-1                    | Glycol Regenerator           | nm-VOC                      | 0.1639           | 0.7178 |
|                           |                              | H <sub>2</sub> S            | 0.0675           | 0.2957 |
|                           |                              | Benzene                     | 0.2206           | 0.9662 |
|                           |                              | Toluene                     | 0.5518           | 2.4170 |
|                           |                              | Ethylbenzene                | 0.9579           | 4.1955 |
|                           |                              | Xylene                      | 1.2011           | 5.2607 |
|                           |                              | n-Hexane                    | 0.0188           | 0.0823 |
| 29                        | Glycol Regenerator           | PM <sub>10</sub>            | 0.0072           | 0.0315 |
|                           |                              | VOC                         | 0.0023           | 0.0101 |
|                           |                              | CO                          | 0.0126           | 0.0552 |
|                           |                              | NO <sub>x</sub>             | 0.0600           | 0.2628 |
|                           |                              | SO <sub>2</sub>             | 0.0004           | 0.0020 |
| DEHY-2                    | Glycol Regenerator<br>Vent   | nm-VOC                      | 0.1640           | 0.7182 |
|                           |                              | H <sub>2</sub> S            | 0.0677           | 0.2965 |
|                           |                              | Benzene                     | 0.2027           | 0.8876 |
|                           |                              | Toluene                     | 0.4824           | 2.1127 |
|                           |                              | Ethylbenzene                | 0.8159           | 3.5736 |
|                           |                              | Xylene                      | 0.9654           | 4.2286 |
|                           |                              | n-Hexane                    | 0.0188           | 0.0823 |

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| Emission<br>Point No. (1) | Source<br>Name (2)                   | Air Contaminant<br>Name (3) | Emission Rates * |         |
|---------------------------|--------------------------------------|-----------------------------|------------------|---------|
|                           |                                      |                             | lb/hr            | TPY     |
| 30                        | Amine Reclaimer                      | PM <sub>10</sub>            | 0.0240           | 0.1049  |
|                           |                                      | VOC                         | 0.0076           | 0.0335  |
|                           |                                      | CO                          | 0.0419           | 0.1836  |
|                           |                                      | NO <sub>x</sub>             | 0.1997           | 0.8745  |
|                           |                                      | SO <sub>2</sub>             | 0.0012           | 0.0050  |
| Tank 1                    | Triethylene Glycol<br>Storage Tank   | VOC                         | <0.0100          | <0.0100 |
| Tank 2                    | Methyldiethanolamine<br>Storage Tank | VOC                         | <0.0100          | <0.0100 |
| Tank 3                    | Methyldiethanolamine<br>Storage Tank | VOC                         | <0.0100          | <0.0100 |
| Fugitives                 | Process Fugitive<br>Emissions (4)    | nm-VOC                      | 0.0617           | 0.2702  |
|                           |                                      | H <sub>2</sub> S            | 0.0113           | 0.0496  |

- (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) PM<sub>10</sub> - particulate matter less than 10 microns in diameter  
VOC - volatile organic compounds as defined in General Rule 101.1  
CO - carbon monoxide  
NO<sub>x</sub> - total oxides of nitrogen  
SO<sub>2</sub> - sulfur dioxide  
nm-VOC - Nonmethane hydrocarbons  
H<sub>2</sub>S - hydrogen sulfide
- (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 or 8,760 Hrs/year

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Dated\_\_\_\_\_

