### Permit No. 5611

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                              |   |  |
|---------------|----------------------|---|---------------------------------------|---|--|
| Point No. (1) | Name (2)             | Name (3)  | 1b/hr                                 | <u>TPY</u>                              |  |
| ST201ST       | Hot Oil Heater       | $NO_X$ $PM$ $CO$ $SO_2$ $VOC$                       | 11.00<br>1.10<br>2.70<br>1.07<br>0.20 | 47.00<br>4.60<br>11.74<br>4.69<br>0.94  |  |
| ST301ST       | Regeneration Heater  | $NO_{X}$ $PM$ $CO$ $SO_{2}$ $VOC$                   | 0.09<br>0.01<br>0.02<br>0.01<br><0.01 | 0.40<br>0.05<br>0.08<br>0.05<br>0.03    |  |
| ST403ST       | Superheater          | $NO_X$ $PM$ $CO$ $SO_2$ $VOC$                       | 22.75<br>2.43<br>1.67<br>0.14<br>2.38 | 99.65<br>10.62<br>7.31<br>0.60<br>10.44 |  |
| ST202ST       | "A" Feed Gas Compres | sor NO <sub>X</sub><br>CO<br>SO <sub>2</sub><br>VOC | 1.45<br>2.18<br>0.05<br>0.36          | 6.35<br>9.55<br>0.22<br>1.58            |  |
| ST203ST       | "B" Feed Gas Compres | sor NO <sub>X</sub><br>CO<br>SO <sub>2</sub><br>VOC | 1.45<br>2.18<br>0.05<br>0.36          | 6.35<br>9.55<br>0.22<br>1.58            |  |
| ST204ST       | "C" Feed Gas Compres | sor NO <sub>X</sub><br>CO<br>SO <sub>2</sub>        | 1.45<br>2.18<br>0.05                  | 6.35<br>9.55<br>0.22                    |  |

# AIR CONTAMINANTS DATA

| Emission<br>Point No. (1) | Source<br>Name (2)   | Air Contaminant<br>Name (3)   | <u>Emissior</u><br>lb/hr                                | n Rates *<br>TPY                                       |
|---------------------------|----------------------|---|---|--|
| ST101FL                   | Styrene Flare        | VOC<br>NOx<br>CO<br>SO <sub>2</sub><br>Benzene<br>VOC (total)<br>H <sub>2</sub> S | 0.36<br>3.40<br>24.50<br>0.70<br>1.79<br>39.46<br><0.01 | 1.58<br>3.67<br>26.50<br>0.57<br>0.33<br>7.17<br><0.01 |
| ST501FL                   | Oxygen-Rich Flare    | $NO_X$ $CO$ $SO_2$ $VOC$  | 0.09<br>0.45<br>0.02<br>0.62                            | 0.38<br>1.94<br>0.06<br>2.71                           |
| ST502FL                   | Hydrogen-Rich Flare  | $NO_X$ $CO$ $SO_2$ $VOC$  | 0.33<br>1.67<br><0.01<br>0.45                           | 0.10<br>0.49<br>0.01<br>0.07                           |
| ST601FL                   | Loading Flare        | $NO_X$ $CO$ $SO_2$ $VOC$  | 0.23<br>1.95<br>0.05<br>1.30                            | 0.08<br>0.70<br><0.01<br>1.18                          |
| ST601LR                   | Railcar Loading Rack | VOC   | 2.50  | 0.46   |
| ST602LR                   | Truck Loading Rack   | VOC   | 5.90  | 0.03   |
| ST604LR                   | Truck Loading Rack   | VOC   | 1.92  | 0.07   |
| ST605LR                   | Railcar Loading Rack | VOC   | 6.10  | 0.02   |
| FST301FE                  | 300 Area Fugitives ( | 4) Benzene<br>VOC (total)<br>BF <sub>3</sub>                                      | 0.29<br>4.83<br>0.12                                    | 1.27<br>21.10<br>0.52                                  |

## AIR CONTAMINANTS DATA

| Emission<br>Point No. (1) | Source A<br>Name (2)   | ir Contaminant<br>Name (3) | <u>Emission</u><br>lb/hr | Emission Rates * Ib/hr TPY |  |
|---------------------------|------------------------|----------------------------|--------------------------|----------------------------|--|
| FST401FE                  | 400 Area Fugitives (4) | VOC                        | 3.53                     | 15.51                      |  |
| FST501FE                  | 500 Area Fugitives (4) | VOC                        | 1.71                     | 7.53                       |  |
| FST601FE                  | Loading Fugitives (4)  | Benzene<br>VOC (total)     | 0.03<br>0.13             | 0.13<br>0.54               |  |
| FST701FE                  | Storage Fugitives (4)  | Benzene<br>VOC (total)     | 0.07<br>0.90             | 0.30<br>3.94               |  |
| FST902FE                  | Styrene Cooling Tower  | VOC                        | 0.76                     | 3.31                       |  |
| ST001WT                   | Process Drains         | VOC                        | 0.27                     | 1.19                       |  |
| ST502ST                   | TBC System             | VOC                        | 1.39                     | 0.02                       |  |
| ST524-B                   | Tank 524-B             | VOC                        | 0.01                     | 0.04                       |  |
| ST710VN                   | Tank V-10 - CAS        | VOC                        | 0.07                     | <0.01                      |  |
| ST711VN                   | Tank V-11 - CAS        | VOC                        | 0.12                     | <0.01                      |  |
| ST735TK                   | Tank V-35              | VOC                        | 1.37                     | 1.96                       |  |
| ST737TK                   | Tank V-37              | VOC                        | 14.63                    | 0.98                       |  |
| ST742TK                   | Tank V-42              | VOC                        | 1.91                     | 1.96                       |  |
| EY005FL                   | Flare (5)              |                            |                          |                            |  |

- (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)  $NO_X$  total oxides of nitrogen
  - PM particulate matter
  - CO carbon monoxide
  - SO<sub>2</sub> sulfur dioxide
  - VOC volatile organic compounds as defined in General Rule 101.1
  - H₂S hydrogen sulfide
  - BF<sub>3</sub> boron trifluoride
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) This Olefins Plant Flare is used as backup for Flare ST101FL.

| *<br>fo | Emission<br>Callowing max | rates are<br>imum operat |    |          | facilitie | s are | limit | ed by | the |
|---------|---------------------------|--------------------------|----|----------|-----------|-------|-------|-------|-----|
| Н       | rs/day                    | _Days/week_              | We | eks/yeaı | · 0       | Hrs/  | year  | 8,760 |     |

Dated