

# Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 19930, PSDTX789M1, PSDTX790, and N174

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, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

## Air Contaminants Data

| Emission Point No. (1)       | Source Name (2)  | Air Contaminant Name (3) | Emission Rates |         |
|------------------------------|--|--------------------------|----------------|---------|
|                              |  |                          | lbs/hour       | TPY (4) |
| AV5                          | Online Analyzer  | VOC                      | 0.11           | 0.43    |
| AV6                          | Online Analyzer  | VOC                      | 0.01           | 0.03    |
| LO-1                         | Loading Operations   | VOC                      | 3.24           | 9.04    |
| F9                           | West Terminal Process Fugitives (5)  | VOC                      | 0.65           | 2.83    |
| F9PDH                        | PDH Process Fugitives (5)(9)   | VOC                      | 0.07           | 0.31    |
| F-13                         | North Storage Process Fugitives (5)  | VOC                      | 1.86           | 8.14    |
| F18                          | Cogen II Process Fugitives (5)   | VOC                      | 0.10           | 0.46    |
| F-19                         | 900 Heat Pump Area Process Fugitives (5)   | VOC                      | 0.21           | 0.92    |
| F-20                         | 800 Butamer Reactor Area Process Fugitives (5)   | VOC                      | 0.29           | 1.25    |
| F-23                         | 700 Deisobutanizer Area Process Fugitives (5)  | VOC                      | 0.18           | 0.80    |
| F-25                         | Merox Unit Area Process Fugitives (5)  | VOC                      | 0.26           | 1.12    |
| F-26                         | CSP Unit Area Process Fugitives (5)  | VOC                      | 0.07           | 0.29    |
| F-27                         | Defluorinator Unit Area Process Fugitives (5)  | VOC                      | 0.05           | 0.20    |
| 20, 21, 22, 20A, 21A and 22A | Cogen II, three Solar Centaur gas turbines 016GE14.001, 016GE14.002 and 016GE14.003 exhausting thru a fired Heat Recovery Units (HRUs) and then an unfired HRU with three stacks EPNs 20, 21 and 22 or through each turbines HRU bypass stack, EPNs 20A, 21A and 22A | NO <sub>x</sub> (6)      | 16.32          | 64.64   |
|                              |  | CO                       | 33.46          | 103.16  |
|                              |  | VOC                      | 0.68           | 1.95    |
|                              |  | PM                       | 1.47           | 5.95    |
|                              |  | PM <sub>10</sub>         | 1.47           | 5.95    |
|                              |  | PM <sub>2.5</sub>        | 1.47           | 5.95    |
|                              |  | SO <sub>2</sub>          | 2.51           | 1.00    |
|                              |  | HCl (8)                  | 0.18           | 0.24    |

Emission Sources - Maximum Allowable Emission Rates

|                                    |  |                     |       |        |
|------------------------------------|--|---------------------|-------|--------|
| 23, 24, 25,<br>23A, 24A and<br>25A | DIB 900, three Solar Centaur gas turbines<br>53CM12001, 053CM12002 and 053CM12003<br>exhausting thru a fired HRU with three stacks<br>EPNs 23, 24 and 25 or through each turbines<br>HRU bypass stack, EPNs 23A, 24A and 25A | CO                  | 53.63 | 94.28  |
|                                    |  | NO <sub>x</sub> (7) | 44.34 | 134.69 |
|                                    |  | PM                  | 2.72  | 11.05  |
|                                    |  | PM <sub>10</sub>    | 2.72  | 11.05  |
|                                    |  | PM <sub>2.5</sub>   | 2.72  | 11.05  |
|                                    |  | SO <sub>2</sub>     | 10.82 | 34.08  |
|                                    |  | VOC                 | 2.98  | 12.08  |
|                                    |  | HCl (8)             | 0.06  | 0.23   |

- (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 Title 30 Texas Administrative Code § 101.1
- NO<sub>x</sub> - total oxides of nitrogen
- SO<sub>2</sub> - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
- PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
- PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- HCl - hydrogen chloride
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) PSDTX789M1 pollutant.
- (7) PSDTX790 pollutant.
- (8) Total hourly HCl emissions from the Cogen II and DIB 900 Units may not exceed 0.18 lbs/hour. Total annual HCl emissions from the Cogen II and DIB 900 Units may not exceed 0.24 TPY.
- (9) Fugitive components represented by this EPN are subject to 28LAER.

Date: November 8, 2019