## Emission Sources - Maximum Allowable Emission Rates

# Permit Number 8199A

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 | Emission Rates |         |
|------------------------|--|-----------------|----------------|---------|
|                        |  | Name (3)        | lbs/hour       | TPY (4) |
| 16                     | FL-1 WGAS-ALC HP Flare                                 | NO <sub>x</sub> | 7.25           | 11.07   |
|                        |  | со              | 75.66          | 111.64  |
|                        |  | voc             | 30.62          | 24.06   |
|                        |  | SO <sub>2</sub> | 0.29           | 1.28    |
|                        |  | HRVOC           | 4.85           | 3.53    |
| 17                     | D-603 MEA Storage Tank                                 | voc             | 0.14           | <0.01   |
| 18                     | Spent MEA Tank D-605                                   | voc             | 0.01           | <0.01   |
| 23                     | Tank D-23  | voc             | 1.71           |         |
| 24                     | Tank D-24  | voc             | 1.71           |         |
| 27                     | Tank D-27  | voc             | 1.71           |         |
| D-23, D-24 and D-27    | Annual emissions cap for Tanks D-<br>23, D-24 and D-27 | voc             |                | 0.31    |
| 47                     | Tank D-668   | voc             | 0.01           | <0.01   |
| 48                     | Tank D-661   | voc             | 0.08           | 0.02    |
| 50                     | CO <sub>2</sub> Stripper Vent                          | со              | 20.25          | 80.64   |
|                        |  | voc             | 0.41           | 1.62    |
| 52                     | Tank D-662A  | voc             | 0.24           | 0.02    |
| 53                     | Tank D-662B  | voc             | 0.24           | 0.02    |
| 54                     | Tank D-662C  | voc             | 0.24           | 0.02    |
| 58                     | Loading Scrubber                                       | voc             | 7.77           | 0.63    |
| 60                     | D-6012   | voc             | 0.14           | <0.01   |

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| 84     | F-10 Boiler- Production operations      | NO <sub>x</sub>       | 1.80   | 9.40  |
|--------|---|-----------------------|--------|-------|
|        | υμεταιίστις                             | NO <sub>x</sub> (MSS) | 18.00  |       |
|        |   | СО                    | 6.66   | 38.75 |
|        |   | CO (MSS)              | 798.27 |       |
|        |   | РМ                    | 0.90   | 3.94  |
|        |   | PM <sub>10</sub>      | 0.90   | 3.94  |
|        |   | PM <sub>2.5</sub>     | 0.90   | 3.94  |
|        |   | VOC                   | 1.71   | 6.23  |
|        |   | SO <sub>2</sub>       | 3.85   | 15.17 |
|        |   | NH <sub>3</sub>       | 0.81   | 3.54  |
|        |   | HRVOC                 | 0.03   | 0.15  |
| 146    | D74 Process Alcohol Liquid<br>Loading   | voc                   | <0.01  | <0.01 |
| 601    | F-601 Preheater - Production operations | NO <sub>x</sub>       | 0.84   | 3.68  |
|        | operations                              | СО                    | 1.40   | 6.13  |
|        |   | CO (MSS)              | 1.38   |       |
|        |   | РМ                    | 0.10   | 0.46  |
|        |   | PM <sub>10</sub>      | 0.10   | 0.46  |
|        |   | PM <sub>2.5</sub>     | 0.10   | 0.46  |
|        |   | voc                   | 0.08   | 0.33  |
|        |   | VOC (MSS)             | 0.09   |       |
|        |   | SO <sub>2</sub>       | 0.20   | 0.88  |
| 16B    | Low Pressure Flare                      | NO <sub>x</sub>       | 1.03   | 1.78  |
|        |   | СО                    | 8.34   | 13.39 |
|        |   | VOC                   | 7.66   | 9.10  |
|        |   | SO <sub>2</sub>       | 0.13   | 0.26  |
|        |   | HRVOC                 | 0.31   | 0.32  |
|        |   |                       |        |       |
| CTWR-1 | CTWR-1 Cooling Tower                    | voc                   | 0.55   | 0.88  |
|        | i e                                     |                       |        |       |

HRVOC

0.11

0.18

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| FUG-F10               | F-10 Fugitives (5)                    | voc               | 0.24  | 1.04  |
|-----------------------|---------------------------------------|-------------------|-------|-------|
|                       |                                       | NH <sub>3</sub>   | 0.06  | 0.28  |
| FUG-ALC               | Process Alcohol Fugitives (5)         | voc               | 3.90  | 17.10 |
|                       |                                       | HRVOC             | 0.76  | 3.31  |
| FUG-NH₃               | Ammonia Fugitives (5)                 | NH₃               | 0.11  | 0.48  |
| FUG-PX                | Plasticizer Fugitives (5)             | voc               | 1.24  | 5.44  |
| MVLOADING             | Marine Loading Loss                   | voc               | 1.31  | 0.09  |
| PXFILTER              | Plast. Filtration Fug.                | voc               | 1.07  | 4.69  |
| RRLOADING             | Rail Loading Losses                   | voc               | 4.40  |       |
| TTLOADING             | Truck and ISO Container Loading Loss  | voc               | 2.12  |       |
| RRLOADING & TTLOADING | Rail and Truck - annual emissions cap | voc               |       | 0.55  |
| WTRLOADING            | Wastewater Truck Loading              | voc               | 0.07  | <0.01 |
| 103                   | Powder Unloading Line<br>(POW-UL)     | PM                | 0.03  | 0.11  |
|                       |                                       | PM <sub>10</sub>  | <0.01 | 0.01  |
|                       |                                       | PM <sub>2.5</sub> | <0.01 | 0.01  |
| 104                   |                                       | PM                | 0.08  | 0.35  |
|                       |                                       | PM <sub>10</sub>  | 0.01  | 0.04  |
|                       |                                       | PM <sub>2.5</sub> | <0.01 | 0.02  |
| FUG-POW               |                                       | PM                | 0.01  | 0.05  |
|                       |                                       | PM <sub>10</sub>  | <0.01 | <0.01 |
|                       |                                       | PM <sub>2.5</sub> | <0.01 | <0.01 |
| CHLOADING             | D633LOAD Catalyst Heavies<br>Loading  | VOC               | <0.01 | <0.01 |

(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.

 volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
highly reactive volatile organic compounds as defined in 30 TAC § 115.10 (3) VOC

HRVOC

- total oxides of nitrogen  $NO_x$ 

- sulfur dioxide  $SO_2$ 

РМ - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented

- total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as  $PM_{10}$ 

represented

 $PM_{\rm 2.5}$ - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

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| NH₃ | - Ammonia |
|-----|-----------|
|-----|-----------|

- (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.

Date: February 18, 2022

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