## Emission Sources - Maximum Allowable Emission Rates

## Permit Number 2467

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<br>Point No. (1) | Source Name (2)                                       | Air Contaminant<br>Name (3) | Emission Rates |         |
|---------------------------|---|-----------------------------|----------------|---------|
|                           |   |                             | lbs/hour       | TPY (4) |
| E09A032                   | Site flare LPO-10 Operation (6)                       | VOC                         | 99.04          | 209.31  |
|                           |   | СО                          | 77.67          | 148.58  |
|                           |   | NO <sub>X</sub>             | 8.80           | 17.86   |
|                           |   | Ethylene                    | 4.57           | 15.25   |
| E10C060                   | Syn gas flare LPO-10 operation (6) (7)                | VOC                         | 98.53          | 41.57   |
|                           |   | СО                          | 76.81          | 32.96   |
|                           |   | NO <sub>X</sub>             | 8.64           | 3.58    |
|                           |   | Ethylene                    | 4.57           | 0.20    |
| E09A032                   | LPO-10 C5 Startup and Shutdown                        | VOC                         | 45.75          | 9.88    |
|                           |   | СО                          | 0.83           | 0.42    |
|                           |   | NO <sub>X</sub>             | 0.16           | 0.08    |
| FLRLPO10                  | Total emissions from Site flare and Syn Gas flare (8) | VOC                         | _              | 229.84  |
|                           |   | СО                          | _              | 152.88  |
|                           |   | NO <sub>X</sub>             | _              | 18.69   |
|                           |   | Ethylene                    | _              | 15.16   |
| E10AC3SSM                 | LPO-10 C3 MSS Emissions                               | VOC                         | 0.46           | 0.04    |
|                           |   | Ethylene                    | 0.01           | 0.01    |
| E10AC5SSM                 | LPO-10 C5 MSS Emissions                               | VOC                         | 0.85           | 0.01    |
| F10A-01                   | LPO-10C3 Fugitives                                    | VOC                         | 1.98           | 8.65    |
|                           |   | СО                          | 0.44           | 1.95    |
|                           |   | Ethylene                    | 0.85           | 3.72    |
| F10AC5001                 | LPO-10C5 Fugitives C5 Production                      | VOC                         | 1.82           | 7.99    |
|                           |   | СО                          | 0.98           | 4.31    |

Project Numbers: 259211, 259212

## Emission Sources - Maximum Allowable Emission Rates

| F10AC3001  | LPO-10C5 Fugitives C3 Production | VOC      | 0.88 | 0.63 |
|------------|----------------------------------|----------|------|------|
|            |                                  | со       | 2.13 | 1.54 |
|            |                                  | Ethylene | 0.06 | 0.04 |
| F10AC1101  | LPO-10 Fugitives Isomer Column   | VOC      | 0.95 | 2.94 |
| E10ACATMIX | Mix Tank                         | voc      | 3.49 | 0.16 |

- (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

- (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) Flaring of high-pressure vents is restricted as specified in Special Condition 5.
- (7) Use of the Syn Gas flare (EPN E10C060) in lieu of the Site flare (EPN E10A032) is restricted as specified in Special Condition 13.
- (8) Limit refers to total emissions from the Syn Gas flare (EPN E10C060) and the Site flare (EPN E10A032) for all process vents covered by this permit.

| Date: | November 1, 2017 |  |
|-------|------------------|--|
| Dale  | NOVELLIE /UT/    |  |
|       |                  |  |