## **Emission Sources - Certified Emission Rates**

## Registration Number 98603

This table lists the certified emission rates and all sources of air contaminants on the applicant's property covered by this registration. The emission rates shown are those derived from information submitted as part of the registration for PBR.

## Air Contaminants Data

| CERTIFIED SITEWIDE EMISSIONS                                 |        |                |        |           |        |       |                                     |      |                 |            |         |      |        |     |
|--|--------|----------------|--------|-----------|--------|-------|-------------------------------------|------|-----------------|------------|---------|------|--------|-----|
| EPN / Emission Source  | voc    |                | NOx    |           | СО     |       | PM <sub>10</sub> /PM <sub>2.5</sub> |      | SO <sub>2</sub> |            | CH₂O*   |      | Other  |     |
|  | lbs/hr | tpy            | lbs/hr | tpy       | lbs/hr | tpy   | lbs/hr                              | tpy  | lbs/hr          | tpy        | lbs/hr  | tpy  | lbs/hr | tpy |
| ENG1 / 32.3 hp Continental TM 27 flash gas compressor engine | 0.18   | 0.76           | 0.80   | 3.51      | 1.51   | 6.63  | 0.01                                | 0.03 | <0.01           | <0.01      | 0.01    | 0.03 |        |     |
| ENG1 / Compressor blowdowns**                                | 5.99   | 0.06           |        |           |        |       |                                     |      |                 |            |         |      |        |     |
| ENG2 / Gas lift/jet pump engine                              | 0.53   | 2.33           | 2.08   | 9.11      | 1.28   | 5.59  | 0.06                                | 0.26 | 0.44            | 1.93       | 0.16    | 0.68 |        |     |
| LH / 0.75 MMBtu/hr heater treater                            | <0.01  | 0.02           | 0.07   | 0.31      | 0.06   | 0.26  | 0.01                                | 0.04 | <0.01           | <0.01      |         |      |        |     |
| HT / 0.50 MMBtu/hr heater treater                            | <0.01  | 0.01           | 0.05   | 0.22      | 0.04   | 0.18  | <0.01                               | 0.02 | <0.01           | <0.01      |         |      |        |     |
| TANK1 / 300 bbl produced water tank                          | <0.01  | <0.01          |        |           |        |       |                                     |      |                 |            |         |      |        |     |
| TANK2 / 300 bbl crude oil tank                               | <0.01  | 0.01           |        |           |        |       |                                     |      |                 |            |         |      |        |     |
| TANK3 / 300 bbl crude oil tank                               | <0.01  | 0.01           |        |           |        |       |                                     |      |                 |            |         |      |        |     |
| TANK4 / 300 bbl crude oil tank                               | <0.01  | 0.01           |        |           |        |       |                                     |      |                 |            |         |      |        |     |
| TANK5 / 400 bbl crude oil tank                               | 0.08   | 0.36           |        |           |        |       |                                     |      |                 |            |         |      |        |     |
| COMB / 5.70 MMBtu/hr Leed combustor                          | 3.75   | 3.02           | 0.56   | 2.45      | 0.47   | 2.06  | 0.04                                | 0.18 | <0.01           | 0.01       |         |      |        |     |
| C LOAD / Crude loading                                       | 18.72  | 10.56          |        |           |        |       |                                     |      |                 |            |         |      |        |     |
| PW LOAD / Produced water loading                             | 0.19   | 0.03           |        |           |        |       |                                     |      |                 |            |         |      |        |     |
| FUG / Sitewide fugitives (5)                                 | 0.60   | 2.63           |        |           |        |       |                                     |      |                 |            |         |      |        |     |
| TOTAL EMISSIONS (lbs/hr):                                    | 30.05  |                | 3.56   |           | 3.36   |       | 0.12                                |      | 0.44            |            | 0.17    |      |        |     |
| TOTAL EMISSIONS (TPY):                                       |        | 19.81          |        | 15.60     |        | 14.72 |                                     | 0.53 |                 | 1.92       |         | 0.71 |        |     |
| MAXIMUM OPERATING SCHEDULE:                                  | Hou    | Hours/Day 24 I |        | Days/Week |        | 7     | Weeks/Year 52                       |      |                 | 2 <b>F</b> | lours/Y | 'ear | 8,760  |     |

- Formaldehyde emissions are included in the total VOC emissions.
- Planned MSS emissions from compressor blowdowns for the 32.3 hp Continental TM 27 flash gas compressor engine (EPN ENG1) are based on 1,000 SCF per blowdown, 1 hour per blowdown, and 20 blowdowns per year for each engine. No other planned MSS emissions have been represented or reviewed.
- (1) Emission point identification either specific equipment designation or emission point number from plot
- (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

- formaldehyde CH<sub>2</sub>O

- total oxides of nitrogen  $NO_x$ 

CO - carbon monoxide SO<sub>2</sub> - sulfur dioxide

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

- particulate matter equal to or less than 2.5 microns in diameter

- (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. Emission values should be used for federal applicability.

| Effective | October 26, 2011 |
|-----------|------------------|
| Date:     |                  |

Project Number: 169923