Emission Sources - Maximum Allowable Emission Rates

Permit Number 7559

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 (7) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| 5B1-1 through 5B1-3 | 446 Reactor Baghouse Stack (5)(6) | PM | 2.11 | 28.41 |
| | | $PM_{10}$ | 2.11 | 28.41 |
| | | $PM_{2.5}$ | 2.11 | 28.41 |
| | | $NO_x$ | 4.01 | 52.54 |
| | | CO | 18.32 | 240.05 |
| | | $SO_2$ | 20.00 | 263.00 |
| | | VOC | 2.04 | 26.67 |
| | | POM | 1.00 | 4.38 |
| | | Benzo(a)pyrene | 1.67E-04 | 2.20E-03 |
| | | Total Fluoride | 0.30 | 3.94 |
| 5B2-1 through 5B2-3 | 446 Reactor Baghouse Stack (5)(6) | PM | 2.11 | 28.41 |
| | | $PM_{10}$ | 2.11 | 28.41 |
| | | $PM_{2.5}$ | 2.11 | 28.41 |
| | | $NO_x$ | 4.01 | 52.54 |
| | | CO | 18.32 | 240.05 |
| | | $SO_2$ | 20.00 | 263.00 |
| | | VOC | 2.04 | 26.67 |
| | | POM | 1.00 | 4.38 |
| | | Benzo(a)pyrene | 1.67E-04 | 2.20E-03 |
| | | Total Fluoride | 0.30 | 3.94 |

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| | | | | |
|---|---|---|---|---|
| 5B3-1 through 5B3-3 | 446 Reactor Baghouse Stack (5)(6) | PM | 2.18 | 28.41 |
| | | $PM_{10}$ | 2.18 | 28.41 |
| | | $PM_{2.5}$ | 2.18 | 28.41 |
| | | $NO_x$ | 4.01 | 52.54 |
| | | CO | 18.32 | 240.05 |
| | | $SO_2$ | 20.00 | 263.00 |
| | | VOC | 2.04 | 26.67 |
| | | POM | 1.00 | 4.38 |
| | | Benzo(a)pyrene | 1.67E-04 | 2.20E-03 |
| | | Total Fluoride | 0.30 | 3.94 |
| 5B4-1 through 5B4-3 | 446 Reactor Baghouse Stack (5)(6) | PM | 2.25 | 28.41 |
| | | $PM_{10}$ | 2.25 | 28.41 |
| | | $PM_{2.5}$ | 2.25 | 28.41 |
| | | $NO_x$ | 4.01 | 52.54 |
| | | CO | 18.32 | 240.05 |
| | | $SO_2$ | 20.00 | 263.00 |
| | | VOC | 2.04 | 26.67 |
| | | POM | 1.00 | 4.38 |
| | | Benzo(a)pyrene | 1.67E-04 | 2.20E-03 |
| | | Total Fluoride | 0.30 | 3.94 |
| Total Reactor Emission Cap | 446 Reactor Baghouse Stack (5)(6) | PM | 6.49 | 28.41 |
| | | $PM_{10}$ | 6.49 | 28.41 |

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| | | | | |
|---|---|---|---|---|
| | | $PM_{2.5}$ | 6.49 | 28.41 |
| | | $NO_x$ | 12.03 | 52.54 |
| | | CO | 54.95 | 240.05 |
| | | $SO_2$ | 60.00 | 263.00 |
| | | VOC | 6.11 | 26.67 |
| | | POM | 1.00 | 4.38 |
| | | Benzo(a)pyrene | 5.00E-04 | 2.20E-03 |
| | | Total Fluoride | 0.90 | 3.94 |
| 5D | Tank 60G Baghouse Stack | PM | 0.020 | 0.089 |
| | | $PM_{10}$ | 0.020 | 0.089 |
| | | $PM_{2.5}$ | 0.020 | 0.089 |
| 5E | Tank 160G Baghouse Stack | PM | 0.020 | 0.089 |
| | | $PM_{10}$ | 0.020 | 0.089 |
| | | $PM_{2.5}$ | 0.020 | 0.089 |
| 5F | Tank 162G Baghouse Stack | PM | 0.020 | 0.089 |
| | | $PM_{10}$ | 0.020 | 0.089 |
| | | $PM_{2.5}$ | 0.020 | 0.089 |
| 5JDPUBDPU | 5 and 6 Surge Tank Baghouse Stack | PM | 0.016 | 0.069 |
| | | $PM_{10}$ | 0.016 | 0.069 |
| | | $PM_{2.5}$ | 0.016 | 0.069 |
| 5K | Tank 19R Baghouse Stack | PM | 0.016 | 0.069 |
| | | $PM_{10}$ | 0.016 | 0.069 |
| | | $PM_{2.5}$ | 0.016 | 0.069 |

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

Emission Sources - Maximum Allowable Emission Rates

(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
$NO_x$ - total oxides of nitrogen
$SO_2$ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including $PM_{10}$ and $PM_{2.5}$, as represented
$PM_{10}$ - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
POM - polycyclic organic matter
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Any number of reactors may be operated simultaneously as long as the total reactor hourly and annual emission caps are not exceeded.
(6) The total particulate matter from these sources include the total fluorides and POMs. Benzo(a)pyrene is one of the contaminants in the family of POMs. However, the respective emission rates of total fluorides (some of which may exist as a gas) and POMs shall not be exceeded.
(7) Planned startup and shutdown emissions are included. Maintenance activities are not authorized by this permit.

Date: April 17, 2013