Emission Sources - Maximum Allowable Emission Rates

Permit Number 4421A

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 (6) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| B-1 | No. 1 Boiler Stack | $NO_x$ | 0.39 | 1.69 |
| | | CO | 0.50 | 2.16 |
| | | VOC | 0.08 | 0.34 |
| | | PM | 0.08 | 0.34 |
| | | $PM_{10}$ | 0.08 | 0.34 |
| | | $PM_{2.5}$ | 0.08 | 0.34 |
| | | $SO_2$ | 0.01 | 0.04 |
| | | Total HAPs | 0.02 | 0.10 |
| B-2 | No. 2 Boiler Stack | $NO_x$ | 1.26 | 5.26 |
| | | CO | 1.06 | 4.42 |
| | | VOC | 0.07 | 0.42 |
| | | PM | 0.10 | 0.40 |
| | | $PM_{10}$ | 0.10 | 0.40 |
| | | $PM_{2.5}$ | 0.10 | 0.40 |
| | | $SO_2$ | 0.01 | 0.04 |
| | | Total HAPs | 0.02 | 0.10 |

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| | | | | |
|---|---|---|---|---|
| F-14 | Afterburner Stack<br><br>(Blowstill No. 1 and No. 3 and Knockout Tank) | $NO_x$ | 4.62 | 5.78 |
| | | CO | 49.80 | 62.25 |
| | | VOC | 1.20 | 1.50 |
| | | PM | 6.60 | 8.25 |
| | | $PM_{10}$ | 6.60 | 8.25 |
| | | $PM_{2.5}$ | 6.60 | 8.25 |
| | | $SO_2$ | 69.60 | 87.00 |
| | | Total HAPs | 0.34 | 0.42 |
| | | HCl | 0.34 | 0.42 |
| C-1 | No. 3 Limestone Silo Dust Collector Stack | PM | 0.26 | 0.13 |
| | | $PM_{10}$ | 0.26 | 0.13 |
| | | $PM_{2.5}$ | 0.26 | 0.13 |
| C-2 | Line 1 Mineral Application Process Dust Collector Stack (Granule Run Tank and Sand Run Tank) | PM | 0.34 | 1.47 |
| | | $PM_{10}$ | 0.08 | 0.34 |
| | | $PM_{2.5}$ | 0.01 | 0.04 |
| C-3 | Line 2 Mineral Application Process Dust Collector Stack (Granule Run Tank and Sand Run Tank) | PM | 0.34 | 1.47 |
| | | $PM_{10}$ | 0.08 | 0.34 |
| | | $PM_{2.5}$ | 0.01 | 0.04 |
| C-4 | Sand Silo Dust Collector Stack | PM | 0.03 | 0.13 |
| | | $PM_{10}$ | 0.03 | 0.13 |
| | | $PM_{2.5}$ | 0.03 | 0.13 |
| C-5 | Line 1 and 2 Shingle Substrate Process Dust and Fiber Collector Stack (Line 1 and 2 Unwind Stands and Dry Loopers) | PM | 3.54 | 15.52 |
| | | $PM_{10}$ | 0.80 | 3.50 |
| | | $PM_{2.5}$ | 0.11 | 0.48 |

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| | | | | |
|---|---|---|---|---|
| C-6 | Granule and Head Lap Process Dust Collector Stack (Granule Run Tank) | PM | 0.67 | 2.95 |
| | | $PM_{10}$ | 0.15 | 0.66 |
| | | $PM_{2.5}$ | 0.02 | 0.09 |
| H-1 | No. 2 Born Coating Heater Stack | $NO_x$ | 1.40 | 5.85 |
| | | CO | 1.18 | 4.92 |
| | | VOC | 0.08 | 0.33 |
| | | PM | 0.11 | 0.45 |
| | | $PM_{10}$ | 0.11 | 0.45 |
| | | $PM_{2.5}$ | 0.11 | 0.45 |
| | | $SO_2$ | 0.01 | 0.04 |
| | | Total HAPs | 0.03 | 0.11 |
| H-2 | No. 3 Born Coating Heater Stack | $NO_x$ | 1.40 | 5.85 |
| | | CO | 1.18 | 4.92 |
| | | VOC | 0.08 | 0.33 |
| | | PM | 0.11 | 0.45 |
| | | $PM_{10}$ | 0.11 | 0.45 |
| | | $PM_{2.5}$ | 0.11 | 0.45 |
| | | $SO_2$ | 0.01 | 0.04 |
| | | Total HAPs | 0.03 | 0.11 |
| H-3 | No. 2 Cuttler Coating Heater Stack | $NO_x$ | 0.60 | 2.51 |
| | | CO | 0.51 | 2.11 |
| | | VOC | 0.04 | 0.14 |
| | | PM | 0.05 | 0.19 |
| | | $PM_{10}$ | 0.05 | 0.19 |
| | | $PM_{2.5}$ | 0.05 | 0.19 |
| | | $SO_2$ | <0.01 | 0.02 |
| | | Total HAPS | 0.01 | 0.05 |
| H-4 | Hot Oil Heater No.1 Stack | $NO_x$ | 0.40 | 1.67 |
| | | CO | 0.34 | 1.41 |

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| | | | | |
|---|---|---|---|---|
| | | VOC | 0.03 | 0.10 |
| | | PM | 0.03 | 0.13 |
| | | $PM_{10}$ | 0.03 | 0.13 |
| | | $PM_{2.5}$ | 0.03 | 0.13 |
| | | $SO_2$ | <0.01 | 0.01 |
| | | Total HAPS | 0.01 | 0.03 |
| H-9 | Hot Oil Heater No. 2 Stack | $NO_x$ | 0.13 | 0.55 |
| | | CO | 0.11 | 0.46 |
| | | VOC | 0.01 | 0.03 |
| | | PM | 0.01 | 0.04 |
| | | $PM_{10}$ | 0.01 | 0.04 |
| | | $PM_{2.5}$ | 0.01 | 0.04 |
| | | $SO_2$ | <0.01 | 0.01 |
| | | Total HAPS | <0.01 | 0.01 |
| T-2 | No. 2 Tank Fume Filter Vent (No. 2 Coating Tank and No. 1 Flux Storage Tank) | VOC | 1.90 | 8.82 |
| T-3 | Line 1 Fume Filter Vent (Coater) | CO | 0.45 | 1.95 |
| | | VOC | 2.31 | 10.13 |
| | | PM | 0.04 | 0.19 |
| | | $PM_{10}$ | 0.04 | 0.19 |
| | | $PM_{2.5}$ | 0.04 | 0.19 |
| T-4 | Sealant Storage Tank Vent | VOC | 0.03 | 0.05 |
| T-5 | Laminant Storage Tank Vent | VOC | 0.03 | 0.11 |
| T-6 | Fume Filter Vent (Line 1 Laminator, Line 2 Laminator, and Asphalt Use Tank) | VOC | 0.39 | 1.73 |
| | | PM | <0.01 | <0.01 |
| | | $PM_{10}$ | <0.01 | <0.01 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| | | $PM_{2.5}$ | <0.01 | <0.01 |
| T-7 | Line 2 Coater/Sure Tank Fume Filter Vent (Line 2 Coater, Waste Oil Tank, No. 1 Coating Tank, Coating Surge Tanks 1, 2, and 3 and Sealant Vertical Mixer) | CO | 0.58 | 2.55 |
| | | VOC | 5.28 | 23.11 |
| | | PM | 0.01 | 0.06 |
| | | $PM_{10}$ | 0.01 | 0.06 |
| | | $PM_{2.5}$ | 0.01 | 0.06 |
| T-8 | Imperlux L101 Plasticizer Tank Vent | VOC | <0.01 | <0.01 |
| L1-A | No. 1 Filler Silo Dust Collector A Vent | PM | 0.26 | 1.14 |
| | | $PM_{10}$ | 0.26 | 1.14 |
| | | $PM_{2.5}$ | 0.26 | 1.14 |
| L-2 | No. 2 Filler Silo Dust Collector Vent | PM | 0.26 | 0.59 |
| | | $PM_{10}$ | 0.26 | 0.59 |
| | | $PM_{2.5}$ | 0.26 | 0.59 |
| L-3 | Horizon Limestone Dust Collector Vent (Limestone Filler Heater and Limestone Run Tank) | PM | 0.69 | 3.01 |
| | | $PM_{10}$ | 0.69 | 3.01 |
| | | $PM_{2.5}$ | 0.69 | 3.01 |
| | | $NO_x$ | 0.70 | 3.05 |
| | | CO | 0.28 | 1.20 |
| | | VOC | 0.04 | 0.18 |
| | | $SO_2$ | 0.01 | 0.02 |
| | | Total HAPs | 0.01 | 0.06 |
| F-1 | Fugitives (5) | VOC | 1.90 | 8.31 |
| F-2 | Maintenance Fugitives (5) | $NO_x$ | 0.04 | <0.01 |
| | | CO | <0.01 | <0.01 |
| | | VOC | <0.01 | <0.01 |
| | | PM | 0.01 | <0.01 |
| | | $PM_{10}$ | 0.01 | <0.01 |

Emission Sources - Maximum Allowable Emission Rates

| | | | | |
|---|---|---|---|---|
| | | $PM_{2.5}$ | 0.01 | <0.01 |
| | | $SO_2$ | 0.11 | <0.01 |
| | | Total HAPs | <0.01 | <0.01 |
| F-5 | Line 2 Sealant Applicator System Vent (5) | VOC | 0.03 | 0.10 |
| MFGBLDG | Manufacturing Building (Paint and Ink Jet Printer) (5) | VOC | 0.27 | 1.12 |
| E-1 | Emergency Generator Stack | $NO_x$ | 3.10 | 1.36 |
| | | CO | 0.67 | 0.29 |
| | | VOC | 0.25 | 0.11 |
| | | PM | 0.22 | 0.10 |
| | | $PM_{10}$ | 0.22 | 0.10 |
| | | $PM_{2.5}$ | 0.22 | 0.10 |
| | | $SO_2$ | 0.21 | 0.09 |
| | | Total HAPs | 0.39 | 0.17 |
| G-1 | Batch House (Granule Silos and Granule Truck and Rail Unloading) (5) | PM | 2.62 | 2.62 |
| | | $PM_{10}$ | 2.62 | 2.62 |
| | | $PM_{2.5}$ | 2.62 | 2.62 |
| COOL-1 | Line 1 Cooling Section Building Vent | PM | 0.10 | 0.44 |
| | | $PM_{10}$ | 0.10 | 0.44 |
| | | $PM_{2.5}$ | 0.10 | 0.44 |
| COOL-2 | Line 2 Cooling Section Building Vent | PM | 0.10 | 0.44 |
| | | $PM_{10}$ | 0.10 | 0.44 |
| | | $PM_{2.5}$ | 0.10 | 0.44 |

(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
$NO_x$ - total oxides of nitrogen
$SO_2$ - sulfur dioxide

Emission Sources - Maximum Allowable Emission Rates

| | | |
|---|---|---|
| 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 |
| HCl | - | hydrogen chloride |
| HAP | - | hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C |

(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) Planned startup and shutdown emissions are included. Planned maintenance emissions resulting from the cleaning of asphalt from piping and from tool cleaning using heating (EPN F-2) are authorized by this permit and other planned maintenance emissions are authorized under PBR 106.263 Registration No. 107586.

Date: January 22, 2015