Emission Sources - Maximum Allowable Emission Rates

Permit Number 2718

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 (9) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY (4) |
| CHF | Cullet Handling Fugitives (Rail and Truck Unloading, Stockpile, and Transfer to Crusher Feed Hopper) | PM | 0.12 | 0.53 |
| | | $PM_{10}$ | 0.05 | 0.24 |
| TRACKBLDG | Track Shed Building Fugitives (Bulk Bag Unloader Dust Collector, Premix Material Batch Scale Dust Sock, and Premix Blending Dust Collector) (10) | PM | <0.01 | <0.01 |
| | | $PM_{10}$ | <0.01 | <0.01 |
| | | $PM_{2.5}$ | <0.01 | <0.01 |
| BATCHHOUSE | Batch House Fugitives for Minor Raw Material Ingredients (Premix Transport Dust Collector) (10) | PM | <0.01 | <0.01 |
| | | $PM_{10}$ | <0.01 | <0.01 |
| | | $PM_{2.5}$ | <0.01 | <0.01 |
| 1 (7) | Furnace A Stack | PM | 16.00 | 70.10 |
| | | $PM_{10}$ | 16.00 | 70.10 |
| | | VOC | 0.40 | 1.80 |
| | | CO | 5.50 | 24.10 |
| | | $NO_x$ | 75.30 | 329.80 |
| | | $SO_2$ | 38.50 | 168.60 |
| | | $H_2SO_4$ | 7.00 | 30.70 |
| | | HCl | 0.50 | 2.20 |
| | | Pb | 0.03 | 0.11 |
| 1 (8) | Furnace A Stack | PM | 8.38 | 36.72 |
| | | $PM_{10}$ | 8.32 | 36.45 |

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| | | | | |
|---|---|---|---|---|
| | | $PM_{2.5}$ | 8.32 | 36.45 |
| | | VOC | 0.40 | 1.80 |
| | | CO | 5.50 | 24.10 |
| | | $NO_x$ | 24.64 | 92.56 |
| | | $SO_2$ | 30.27 | 61.71 |
| | | $H_2SO_4$ | 2.64 | 11.56 |
| | | HCl | 0.50 | 2.20 |
| | | Pb | 0.03 | 0.11 |
| | | $NH_3$ | 0.68 | 2.97 |
| 55A | Furnace A Refiner Fugitives | PM | 0.03 | 0.13 |
| | | $PM_{10}$ | 0.03 | 0.13 |
| | | $PM_{2.5}$ | 0.03 | 0.13 |
| | | VOC | 0.02 | 0.09 |
| | | CO | 0.32 | 1.41 |
| | | $NO_x$ | 0.38 | 1.67 |
| | | $SO_2$ | 0.01 | 0.01 |
| 56A (7) | Furnace A Alcoves and Forehearths Fugitives | PM | 0.05 | 0.22 |
| | | $PM_{10}$ | 0.05 | 0.22 |
| | | $PM_{2.5}$ | 0.05 | 0.22 |
| | | VOC | 0.04 | 0.16 |
| | | CO | 0.56 | 2.45 |
| | | $NO_x$ | 0.67 | 2.92 |
| | | $SO_2$ | 0.01 | 0.02 |
| 56A (8) | Furnace A Alcoves and Forehearths Fugitives | PM | 0.07 | 0.30 |

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| | | | | |
|---|---|---|---|---|
| | | $PM_{10}$ | 0.07 | 0.30 |
| | | $PM_{2.5}$ | 0.07 | 0.30 |
| | | VOC | 0.05 | 0.22 |
| | | CO | 0.76 | 3.34 |
| | | $NO_x$ | 0.91 | 3.98 |
| | | $SO_2$ | 0.01 | 0.02 |
| 58A (7) | Furnace A Forming Machines Fugitives | PM | 0.77 | 3.35 |
| | | $PM_{10}$ | 0.77 | 3.35 |
| | | $PM_{2.5}$ | 0.77 | 3.35 |
| 58A (8) | Furnace A Forming Machines Fugitives | PM | 0.88 | 3.87 |
| | | $PM_{10}$ | 0.88 | 3.87 |
| | | $PM_{2.5}$ | 0.88 | 3.87 |
| 2 | Furnace B Stack | PM | 13.10 | 57.50 |
| | | $PM_{10}$ | 13.10 | 57.50 |
| | | VOC | 2.63 | 11.50 |
| | | CO | 2.63 | 11.50 |
| | | $NO_x$ | 81.40 | 356.00 |
| | | $SO_2$ | 44.60 | 195.00 |
| | | $H_2SO_4$ | 10.32 | 45.20 |
| | | HCl | 0.36 | 1.58 |
| | | Pb | 0.02 | 0.10 |
| 55B | Furnace B Refiner Fugitives | PM | 0.02 | 0.10 |
| | | $PM_{10}$ | 0.02 | 0.10 |
| | | $PM_{2.5}$ | 0.02 | 0.10 |

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| | | | | |
|---|---|---|---|---|
| | | VOC | 0.02 | 0.08 |
| | | CO | 0.26 | 1.15 |
| | | $NO_x$ | 0.31 | 1.37 |
| | | $SO_2$ | 0.01 | 0.01 |
| 56B | Furnace B Alcoves and Forehearths Fugitives | PM | 0.05 | 0.23 |
| | | $PM_{10}$ | 0.05 | 0.23 |
| | | $PM_{2.5}$ | 0.05 | 0.23 |
| | | VOC | 0.04 | 0.16 |
| | | CO | 0.57 | 2.49 |
| | | $NO_x$ | 0.68 | 2.96 |
| | | $SO_2$ | 0.01 | 0.02 |
| 58B | Furnace B Forming Machines Fugitives | PM | 0.66 | 2.89 |
| | | $PM_{10}$ | 0.66 | 2.89 |
| | | $PM_{2.5}$ | 0.66 | 2.89 |
| 4 (5) | Furnace D Stack | PM | 30.38 | 134.90 |
| | | $PM_{10}$ | 30.38 | 134.90 |
| | | VOC | 0.20 | 0.90 |
| | | CO | 8.90 | 39.00 |
| | | $NO_x$ | 121.70 | 533.00 |
| | | $SO_2$ | 61.20 | 268.00 |
| | | $H_2SO_4$ | 10.90 | 47.70 |
| | | HCl | 0.40 | 1.80 |
| | | Pb | 0.03 | 0.12 |
| 4 (6) | Furnace D Stack | PM | 9.28 | 40.60 |

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| | | | | |
|---|---|---|---|---|
| | | $PM_{10}$ | 9.21 | 40.30 |
| | | $PM_{2.5}$ | 9.21 | 40.30 |
| | | VOC | 0.20 | 0.90 |
| | | CO | 3.90 | 17.10 |
| | | $NO_x$ | 27.30 | 102.30 |
| | | $SO_2$ | 33.54 | 68.20 |
| | | $H_2SO_4$ | 3.40 | 14.90 |
| | | HCl | 0.53 | 2.30 |
| | | Pb | 0.02 | 0.09 |
| | | $NH_3$ | 0.75 | 3.30 |
| 55D | Furnace D Refiner Fugitives | PM | 0.03 | 0.13 |
| | | $PM_{10}$ | 0.03 | 0.13 |
| | | $PM_{2.5}$ | 0.03 | 0.13 |
| | | VOC | 0.02 | 0.10 |
| | | CO | 0.34 | 1.48 |
| | | $NO_x$ | 0.40 | 1.76 |
| | | $SO_2$ | 0.01 | 0.01 |
| 56D (5) | Furnace D Alcoves and Forehearths Fugitives | PM | 0.04 | 0.18 |
| | | $PM_{10}$ | 0.04 | 0.18 |
| | | $PM_{2.5}$ | 0.04 | 0.18 |
| | | VOC | 0.03 | 0.13 |
| | | CO | 0.46 | 2.02 |
| | | $NO_x$ | 0.55 | 2.40 |
| | | $SO_2$ | 0.01 | 0.01 |

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| | | | | |
|---|---|---|---|---|
| 56D (6) | Furnace D Alcoves and Forehearths Fugitives | PM | 0.06 | 0.27 |
| | | $PM_{10}$ | 0.06 | 0.27 |
| | | $PM_{2.5}$ | 0.06 | 0.27 |
| | | VOC | 0.05 | 0.20 |
| | | CO | 0.69 | 3.03 |
| | | $NO_x$ | 0.82 | 3.61 |
| | | $SO_2$ | 0.01 | 0.02 |
| 58D (5) | Furnace D Forming Machines Fugitives | PM | 0.84 | 3.67 |
| | | $PM_{10}$ | 0.84 | 3.67 |
| | | $PM_{2.5}$ | 0.84 | 3.67 |
| 58D (6) | Furnace D Forming Machines Fugitives | PM | 0.98 | 4.28 |
| | | $PM_{10}$ | 0.98 | 4.28 |
| | | $PM_{2.5}$ | 0.98 | 4.28 |
| 7 | Grit Blast Fugitives | PM | 0.02 | 0.10 |
| | | $PM_{10}$ | 0.02 | 0.10 |
| 8 | Grit Blast Fugitives | PM | 0.02 | 0.10 |
| | | $PM_{10}$ | 0.02 | 0.10 |
| 18A - 18D | Raw Material Receiving Batch and Mixing Baghouse Stacks | PM | 2.48 | 12.00 |
| | | $PM_{10}$ | 2.48 | 12.00 |
| 18E | Minor Raw Material Surge Hopper Baghouse Stack | PM | 0.02 | <0.01 |
| | | $PM_{10}$ | 0.02 | <0.01 |
| 57 | Shear Spray Fugitives | VOC | 2.00 | 8.75 |
| 59A | Lehr Fugitives | PM | 0.30 | 1.31 |
| | | $PM_{10}$ | 0.30 | 1.31 |

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| | | | | |
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| | | $PM_{2.5}$ | 0.30 | 1.31 |
| | | VOC | 0.22 | 0.94 |
| | | CO | 3.29 | 14.43 |
| | | $NO_x$ | 3.92 | 17.18 |
| | | $SO_2$ | 0.02 | 0.10 |
| 59B | Belt Heater Fugitives | PM | 0.01 | 0.07 |
| | | $PM_{10}$ | 0.01 | 0.07 |
| | | $PM_{2.5}$ | 0.01 | 0.07 |
| | | VOC | 0.01 | 0.05 |
| | | CO | 0.16 | 0.72 |
| | | $NO_x$ | 0.20 | 0.86 |
| | | $SO_2$ | 0.01 | 0.01 |
| 19 | Hot End Surface Treatment Baghouse Stack | PM | 0.46 | 2.07 |
| | | $PM_{10}$ | 0.46 | 2.07 |
| | | $NH_3$ | 2.86 | 12.50 |
| | | HCl | 0.04 | 0.17 |
| | | VOC | 0.72 | 3.15 |
| 71 | Bottle Coder Fugitives | VOC | 0.21 | 0.93 |
| 72 | Glue Pot Fugitives | VOC | 0.45 | 1.97 |
| 73 | Carton Coder Fugitives | VOC | 0.15 | 0.66 |
| 30 | Reagent Silo Dust Collector Stack | PM | 0.12 | 0.01 |
| | | $PM_{10}$ | 0.12 | 0.01 |
| | | $PM_{2.5}$ | 0.12 | 0.01 |
| 31 | ESP Dust Silo Dust Collector Stack | PM | 0.02 | 0.09 |

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| | | | | |
|---|---|---|---|---|
| | | $PM_{10}$ | 0.02 | 0.09 |
| | | $PM_{2.5}$ | 0.02 | 0.09 |
| 35 | Emergency Generator Stack | PM | 0.85 | 0.04 |
| | | $PM_{10}$ | 0.71 | 0.04 |
| | | $PM_{2.5}$ | 0.69 | 0.04 |
| | | VOC | 0.58 | 0.03 |
| | | CO | 13.50 | 0.68 |
| | | $NO_x$ | 24.11 | 1.21 |
| | | $SO_2$ | 0.03 | <0.01 |
| 70 | Oil/Water Separator Fugitives | VOC | 1.2 | 5.26 |
| 74 | Cooling Tower Vents | PM | 0.40 | 1.75 |
| | | $PM_{10}$ | 0.30 | 1.31 |
| | | $PM_{2.5}$ | 0.30 | 1.31 |
| 75 | Parts Washer Fugitives | VOC | 0.22 | 0.97 |
| MSS-A | Furnace A MSS | PM | 12.41 | 2.00 |
| | | $PM_{10}$ | 11.80 | 2.00 |
| | | $PM_{2.5}$ | 11.31 | 2.00 |
| | | $NO_x$ | 73.75 | 36.00 |
| | | $SO_2$ | 78.67 | 38.00 |
| | | $H_2SO_4$ | 8.60 | 5.00 |
| MSS-D | Furnace D MSS | PM | 31.07 | 4.00 |
| | | $PM_{10}$ | 29.51 | 4.00 |
| | | $PM_{2.5}$ | 28.25 | 4.00 |
| | | $NO_x$ | 116.43 | 56.00 |

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| | | | | |
|---|---|---|---|---|
| | | $SO_2$ | 124.27 | 60.00 |
| | | $H_2SO_4$ | 13.59 | 7.00 |

(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
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
$H_2SO_4$ - sulfuric acid
HCl - hydrogen chloride
Pb - lead as particulate matter
$NH_3$ - ammonia
(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) Effective prior to installation and commencing operation of all control devices and rebuilding of alcoves, forehearths, and forming machines represented in the 2012 Amendment Application.
(6) Effective after installation and commencing operation of all control devices and rebuilding of alcoves, forehearths, and forming machines represented in the 2012 Amendment Application.
(7) Effective prior to installation and commencing operation of all control devices and rebuilding of alcoves, forehearths, and forming machines represented in the 2013 Amendment Application.
(8) Effective after installation and commencing operation of all control devices and rebuilding of alcoves, forehearths, and forming machines represented in the 2013 Amendment Application.
(9) Planned startup and shutdown emissions are included. Maintenance activities, except as specified in Special Condition Nos. 27 through 31, are not authorized by this permit and will need separate authorization, unless the activity can meet the conditions of 30 TAC § 116.119.
(10) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: February 3, 2014