

Emission Sources - Maximum Allowable Emission Rates

Permit Number 108113 and PSDTX1344

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) |
| 1 | Dock Ore Unloading and Product Loading Gantry Crane (5) | PM | 0.28 | 1.22 |
| | | PM ₁₀ | 0.13 | 0.58 |
| | | PM _{2.5} | 0.02 | 0.09 |
| 4A | Oxide Unloading Transfer Fabric Filter Stack | PM | 0.07 | 0.31 |
| | | PM ₁₀ | 0.07 | 0.31 |
| | | PM _{2.5} | 0.05 | 0.23 |
| 4B | Oxide Unloading and Product Loading Fabric Filter Stack | PM | 0.07 | 0.31 |
| | | PM ₁₀ | 0.07 | 0.31 |
| | | PM _{2.5} | 0.05 | 0.23 |
| 5A | Oxide Pellet Transfer (Pre-Storage) Fabric Filter Stack | PM | 0.07 | 0.31 |
| | | PM ₁₀ | 0.07 | 0.31 |
| | | PM _{2.5} | 0.05 | 0.23 |
| 5B | Oxide Pellet Transfer (Post-Storage) Fabric Filter Stack | PM | 0.07 | 0.31 |
| | | PM ₁₀ | 0.07 | 0.31 |
| | | PM _{2.5} | 0.05 | 0.23 |
| 6 | Oxide Pellet Transfer (Post-Storage) Fabric Filter Stack | PM | 0.05 | 0.22 |
| | | PM ₁₀ | 0.05 | 0.22 |
| | | PM _{2.5} | 0.04 | 0.17 |

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| | | | | |
|----|--|-------------------|------|-------|
| 7A | Oxide Day Bin Filling Fabric Filter Stack | PM | 0.13 | 0.57 |
| | | PM ₁₀ | 0.13 | 0.57 |
| | | PM _{2.5} | 0.10 | 0.43 |
| 7B | Oxide Day Bin Discharge Fabric Filter Stack | PM | 0.64 | 2.82 |
| | | PM ₁₀ | 0.64 | 2.82 |
| | | PM _{2.5} | 0.48 | 2.12 |
| 7C | Oxide Day Bin Off Spec Fabric Filter Stack | PM | 0.12 | 0.53 |
| | | PM ₁₀ | 0.12 | 0.53 |
| | | PM _{2.5} | 0.09 | 0.40 |
| 7D | Oxide Tower Transfer Fabric Filter Stack | PM | 0.05 | 0.22 |
| | | PM ₁₀ | 0.05 | 0.22 |
| | | PM _{2.5} | 0.04 | 0.17 |
| 16 | Furnace Charge Hopper Loading Silos Fabric Filter Stack | PM | 0.01 | <0.01 |
| | | PM ₁₀ | 0.01 | <0.01 |
| | | PM _{2.5} | 0.01 | <0.01 |
| 17 | Charge Hopper Fabric Filter Stack | PM | 0.10 | 0.44 |
| | | PM ₁₀ | 0.10 | 0.44 |
| | | PM _{2.5} | 0.08 | 0.33 |
| | | NO _x | 2.02 | 8.84 |
| | | SO ₂ | 0.24 | 1.05 |
| | | CO | 1.83 | 8.03 |
| | | VOC | 0.18 | 0.81 |

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|----|--|-------------------|-------|--------|
| 29 | Reformer Main Flue Ejector Stack | PM | 4.20 | 18.39 |
| | | PM ₁₀ | 4.20 | 18.39 |
| | | PM _{2.5} | 4.20 | 18.39 |
| | | NO _x | 83.96 | 367.74 |
| | | SO ₂ | 10.51 | 32.20 |
| | | CO | 76.33 | 334.31 |
| | | VOC | 7.69 | 33.67 |
| | | n-Hexane | 0.41 | 1.80 |
| 8 | Furnace Dedusting (BSG Dust Collection) Wet Scrubber Stack | PM | 2.50 | 10.95 |
| | | PM ₁₀ | 2.50 | 10.95 |
| | | PM _{2.5} | 0.50 | 2.19 |
| | | NO _x | 2.02 | 8.84 |
| | | SO ₂ | 0.24 | 1.05 |
| | | CO | 2.82 | 12.36 |
| | | VOC | 0.18 | 0.81 |
| 38 | Hot Pressure Relief Vent (Flare) | PM | 0.02 | 0.08 |
| | | PM ₁₀ | 0.02 | 0.08 |
| | | PM _{2.5} | 0.02 | 0.08 |
| | | NO _x | 0.68 | 2.96 |
| | | SO ₂ | <0.02 | <0.01 |
| | | CO | 7.25 | 31.76 |
| | | VOC | 0.04 | 0.02 |
| | | Pb | <0.01 | <0.01 |

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| | | | | |
|-----|-------------------------------------|-------------------|-------|-------|
| 9 | Briquetter Dedusting Scrubber Stack | PM | 3.97 | 17.38 |
| | | PM ₁₀ | 3.97 | 17.38 |
| | | PM _{2.5} | 0.79 | 3.48 |
| | | NO _x | 1.01 | 4.42 |
| | | SO ₂ | 0.12 | 0.52 |
| | | CO | 0.92 | 4.02 |
| | | VOC | 0.09 | 0.40 |
| 11 | HBI Cooling Conveyer Scrubber Stack | PM | 1.90 | 8.34 |
| | | PM ₁₀ | 1.90 | 8.34 |
| | | PM _{2.5} | 0.95 | 4.17 |
| 14 | HBI Pile (5) | PM | 0.32 | 1.39 |
| | | PM ₁₀ | 0.13 | 0.56 |
| | | PM _{2.5} | 0.04 | 0.16 |
| 36 | Remet/Fines Storage (5) | PM | 0.17 | 0.74 |
| | | PM ₁₀ | 0.04 | 0.20 |
| | | PM _{2.5} | 0.01 | 0.02 |
| 30A | Process Water Degasser (5) | CO | 21.72 | 95.13 |
| 30B | Process Water Degasser (5) | CO | 2.54 | 11.11 |
| 33 | Salt Water Cooling Tower (5) | PM | 2.61 | 11.44 |
| | | PM ₁₀ | 0.08 | 0.34 |
| | | PM _{2.5} | 0.08 | 0.34 |

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| | | | | |
|-----|------------------------------|-------------------|-------|-------|
| 39 | Paved Road Fugitive Dust (5) | PM | - | 1.08 |
| | | PM ₁₀ | - | 0.21 |
| | | PM _{2.5} | - | 0.03 |
| 34 | Emergency Generator | PM | 0.47 | 0.02 |
| | | PM ₁₀ | 0.47 | 0.02 |
| | | PM _{2.5} | 0.47 | 0.02 |
| | | NO _x | 32.09 | 1.60 |
| | | SO ₂ | 0.04 | <0.01 |
| | | CO | 3.80 | 0.19 |
| | | VOC | 0.99 | 0.05 |
| 35 | Fire Pump | PM | 0.03 | <0.01 |
| | | PM ₁₀ | 0.03 | <0.01 |
| | | PM _{2.5} | 0.03 | <0.01 |
| | | NO _x | 2.25 | 0.11 |
| | | SO ₂ | <0.01 | <0.01 |
| | | CO | 0.27 | 0.01 |
| | | VOC | 0.07 | <0.01 |
| ALL | All Sources | All HAPS | - | 2.05 |

- (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
- SO₂ - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
- PM₁₀ - 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
- n-Hexane - n-Hexane
- Pb - lead

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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. Maintenance activities are not authorized by this permit and will need separate authorization unless the activity can meet the conditions of 30 TAC 116.119

Date: September 1, 2015