

Emission Sources - Maximum Allowable Emission Rates

Permit Number 124670 and N016

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 | |
|---------------------------|-----------------------------------|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| 116CT | Cooling Tower | VOC (5) | 0.74 | 3.22 |
| | | PM | 0.55 | 2.42 |
| | | PM ₁₀ | 0.40 | 1.75 |
| | | PM _{2.5} | <0.01 | <0.01 |
| 116F | Refrigeration Fugitives (5) | VOC | 2.06 | 9.04 |
| 230F | 840 Unit Process Fugitives (5) | VOC | 10.40 | 45.54 |
| | | PM | 0.02 | 0.10 |
| | | PM ₁₀ | 0.02 | 0.10 |
| | | PM _{2.5} | 0.02 | 0.10 |
| | | HF | 0.01 | 0.04 |
| | | Nickel Octoate | 0.01 | 0.03 |
| | | Tin Tetrachloride | 0.02 | 0.07 |
| 230T-F105A | Oil Tank | VOC | 0.21 | 0.01 |
| 230T-F105B | Oil Tank | VOC | 0.21 | 0.01 |
| 230T-F115A | Oil Tank | VOC | 0.18 | 0.78 |
| 230T-F115B | Oil Tank | VOC | 0.18 | 0.78 |
| 230T-F200 | Catalyst Tank | VOC | 44.22 | 0.30 |
| 230T-F201 | Catalyst Tank | VOC | 18.03 | 0.39 |
| 230T-F205 | Catalyst Tank | VOC | 36.89 | 0.07 |
| 230T-F222 | Catalyst Tank | VOC | 14.51 | 0.08 |
| 230WF | 840 Unit Wastewater Fugitives (5) | VOC | 4.70 | 1.52 |
| 236F | 840 Unit Finishing Process | VOC | 154.45 | 270.39 |
| 4H-228 | Modifier Makeup Tank | VOC | 6.70 | 0.06 |

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|------------|-----------------------------------|-------------------|--------|--------|
| 230T-F311 | Nitrax Makeup Tank | PM | 0.06 | 0.01 |
| | | PM ₁₀ | 0.06 | 0.01 |
| | | PM _{2.5} | 0.06 | 0.01 |
| 230T-F408 | Tamol Makeup Tank | PM | 0.41 | <0.01 |
| | | PM ₁₀ | 0.41 | <0.01 |
| | | PM _{2.5} | 0.41 | <0.01 |
| 280F | 880 Unit Process Fugitives (5) | VOC | 10.32 | 45.22 |
| 280FLQ504 | 040 Flare | VOC | 28.70 | 18.66 |
| | | NO _x | 1.28 | 0.84 |
| | | CO | 9.23 | 6.08 |
| | | SO ₂ | 0.01 | 0.01 |
| 280T-F201 | Catalyst Tank | VOC | 20.80 | 0.46 |
| 280T-F206 | Catalyst Tank | VOC | 12.61 | 0.05 |
| 280T-F216 | Catalyst Tank | VOC | 8.98 | 0.77 |
| 280T-F507 | Catalyst Tank | PM | 0.01 | 0.01 |
| | | PM ₁₀ | 0.01 | 0.01 |
| | | PM _{2.5} | 0.01 | 0.01 |
| 280V-M202 | HF Scrubber | VOC | 0.63 | 0.01 |
| | | HF | 0.02 | 0.02 |
| 280WF | 880 Unit Wastewater Fugitives (5) | VOC | 20.39 | 13.82 |
| 286F | 880 Unit Finishing Process | VOC | 188.40 | 549.95 |
| 850FL-Q504 | 850 Unit SPP Flare (6) | CO | 14.73 | 14.31 |
| | | NO _x | 2.89 | 2.81 |
| | | VOC | 39.41 | 23.47 |
| | | SO ₂ | <0.01 | <0.01 |
| 850FL-Q504 | 850 Unit SPP Flare (7) | CO | 21.35 | 3.07 |
| | | NO _x | 2.96 | 0.43 |
| | | VOC | 53.99 | 7.77 |
| 850TO-Q600 | Regenerative Thermal Oxidizer | CO | 0.50 | 2.19 |
| | | NO _x | 0.90 | 3.94 |
| | | PM | 0.02 | 0.09 |
| | | PM ₁₀ | 0.02 | 0.09 |

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| | | | | |
|------------|---------------------------------------|-------------------|--------|--------|
| | | PM _{2.5} | 0.02 | 0.09 |
| | | SO ₂ | 0.01 | 0.02 |
| | | VOC | 1.97 | 3.30 |
| 850T-F406 | Dillic Makeup Tank | VOC | 0.10 | 0.10 |
| 850T-F409 | Recycle Water Tank | VOC | 0.05 | 0.20 |
| 850T-F225 | Tributic Vent | VOC | 9.23 | 3.38 |
| 850T-F207 | Showic Vent | VOC | 46.15 | 1.80 |
| 856F | 850 Unit Finishing Building Fugitives | VOC | 161.27 | 261.50 |
| 850F | 850 Unit Process Piping Fugitives (5) | HF | 0.07 | 0.30 |
| | | SiCl ₄ | <0.01 | 0.01 |
| | | SnCl ₄ | 0.21 | 0.92 |
| | | VOC | 5.89 | 25.78 |
| 832CT | 850 Unit Cooling Tower | VOC (5) | 1.26 | 5.52 |
| | | PM | 0.95 | 4.15 |
| | | PM ₁₀ | 0.69 | 3.01 |
| | | PM _{2.5} | <0.01 | 0.01 |
| 850WF | 850 Unit Wastewater Fugitives | HF | 0.01 | <0.01 |
| | | VOC | 3.21 | 4.54 |
| 130FL-Q502 | Utilities Flare (8) | CO | 2.56 | 0.14 |
| | | NO _x | 0.35 | 0.02 |
| | | VOC | 7.42 | 0.42 |
| 5A-202 | Lime Neutralization Sump | SiCl ₄ | 0.02 | 0.01 |
| | | SnCl ₄ | 0.04 | 0.01 |
| | | VOC | 3.11 | 0.18 |
| 850FUGSA | Bag Dump | PM | 0.59 | 0.01 |
| | | PM ₁₀ | 0.59 | 0.01 |
| | | PM _{2.5} | 0.59 | 0.01 |

- (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

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|-------------------|---|
| 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 |
| HF | - hydrogen fluoride |
| SiCl ₄ | - silicon tetrachloride |
| SnCl ₄ | - tin tetrachloride |

- (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) Total allowable emissions, excluding start-up emissions.
- (7) Total allowable start-up emissions.
- (8) These emissions are for the Specialty Polymer Plant's (850 Unit) contribution to this flare, which is permitted under Permit Number 22110.

Date: July 20, 2016