

# Emission Sources - Maximum Allowable Emission Rates

Permit Number 4140A

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.<br>(1) | Source Name (2)                  | Air Contaminant Name (3) | Emission Rates |            |
|---------------------------|----------------------------------|--------------------------|----------------|------------|
|                           |                                  |                          | lbs/hour       | TPY (4)    |
| 33                        | Dry Flow Loading Bin Vent Filter | PM                       | 0.05           | 0.23       |
|                           |                                  | VOC (7)                  | 0.01           | 0.07       |
| 34                        | Storage Silo Filter              | PM                       | 0.01           | 0.02       |
|                           |                                  | VOC (7)                  | 0.01           | --         |
| 48                        | Process Fugitives (5)            | VOC                      | 6.38           | 27.95      |
| 49                        | Silica Dehydrator Filter         | PM                       | 0.01           | 0.02       |
| 71                        | Silica Blow Tank Filter          | PM                       | 0.01           | 0.02       |
| 73                        | Silica Storage Filter            | PM                       | 0.01           | 0.03       |
| 74                        | Silica Blow Tank Filter          | PM                       | 0.01           | 0.02       |
| 75                        | Catalyst Storage Filter          | PM                       | 0.01           | 0.02       |
| 78                        | F3059 Loading Bin Vent Filter    | PM                       | 0.26           | 1.12       |
| 80                        | B Activator Vent Filter          | PM                       | 0.01           | 0.04       |
|                           |                                  | PM <sub>10</sub>         | 0.01           | 0.03       |
|                           |                                  | PM <sub>2.5</sub>        | 0.01           | 0.03       |
|                           |                                  | NH <sub>3</sub>          | 0.99           | 1.97       |
|                           |                                  | SO <sub>2</sub>          | 0.14           | 0.10       |
| 95 - 102                  | Storage Silo Filter              | PM                       | 0.11           | 0.48 (6,9) |
|                           |                                  | VOC                      | 0.7            | 0.42(6,9)  |
| 115                       | F3015 Pellet Startup Silo Filter | PM                       | 0.22           | 0.96       |
| 121                       | F376/F375 Sys 15 Filter          | PM                       | 0.05           | 0.22       |
| 201                       | Activator Vent                   | NOx                      | 0.01           | 0.01       |

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|     |                                     |                   |      |      |
|-----|-------------------------------------|-------------------|------|------|
|     |                                     | CO                | 0.01 | 0.01 |
|     |                                     | VOC               | 1.15 | 0.64 |
|     |                                     | PM                | 0.01 | 0.01 |
| 203 | Catalyst Activator Heater           | NO <sub>x</sub>   | 0.68 | 2.98 |
|     |                                     | CO                | 0.67 | 2.94 |
|     |                                     | VOC               | 0.04 | 0.19 |
|     |                                     | SO <sub>2</sub>   | 0.01 | 0.05 |
|     |                                     | PM <sub>10</sub>  | 0.06 | 0.27 |
|     |                                     | PM <sub>2.5</sub> | 0.05 | 0.20 |
| 204 | Catalyst X Vent Filter              | PM                | 0.02 | 0.09 |
| 207 | V-2465 Feed Hopper                  | PM                | 0.01 | 0.01 |
|     |                                     | VOC               | 0.03 | 0.13 |
| 208 | V-2470 Feed Hopper                  | PM                | 0.01 | 0.01 |
|     |                                     | VOC               | 0.03 | 0.13 |
| 209 | Vibrator Screen Oversized vent      | VOC               | 0.01 | 0.03 |
| 210 | Cooling Tower                       | PM                | 1.86 | 5.09 |
|     |                                     | VOC               | 0.80 | 3.50 |
| 219 | Extruder Feed Silo Vent             | PM                | 0.01 | 0.01 |
|     |                                     | VOC               | 0.01 | 0.03 |
| 220 | Extruder Feed Silo Vent             | PM                | 0.01 | 0.01 |
|     |                                     | VOC               | 0.68 | 2.97 |
| 228 | F3026/F3027 Pellet Blender Filter   | PM                | 0.04 | 0.17 |
| 230 | Pellet Blending and Transfer Filter | PM                | 0.01 | 0.03 |
| 231 | System 8 Pellet Blender Vent Filter | PM                | 0.01 | 0.03 |
| 234 | Pellet Blender Filter Vent          | PM (8)            | 0.01 | 0.02 |
|     |                                     | VOC(7)            | 0.01 | --   |
| 235 | Pellet Blender Filter Vent          | PM (8)            | 0.01 | 0.02 |

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|         |                                 |         |      |      |
|---------|---------------------------------|---------|------|------|
|         |                                 | VOC (7) | 0.01 |      |
| 236     | Pellet Blender Filter Vent      | PM (8)  | 0.01 | 0.02 |
|         |                                 | VOC (7) | 0.01 | --   |
| 237     | Pellet Blender Filter Vent      | PM (8)  | 0.01 | 0.02 |
|         |                                 | VOC (7) | 0.01 | --   |
| 239     | F388/F389 Pellet Blender Filter | PM      | 0.04 | 0.17 |
| 240     | F3048 Additive Transfer Filter  | PM      | 0.01 | 0.04 |
| 272     | "G" Pellet Dryer                | VOC (7) | 0.01 | --   |
| 294     | F3509 Additive Dust Collector   | PM      | 0.01 | 0.04 |
| CHROMGP | GP On-Line Analyzer             | VOC     | 0.01 | 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<sub>x</sub> - total oxides of nitrogen
- SO<sub>2</sub> - sulfur dioxide
- PM - total particulate matter, suspended in the atmosphere, including PM<sub>10</sub> and PM<sub>2.5</sub>, as represented
- PM<sub>10</sub> - total particulate matter equal to or less than 10 microns in diameter, including PM<sub>2.5</sub>, as represented
- PM<sub>2.5</sub> - particulate matter equal to or less than 2.5 microns in diameter
- CO - carbon monoxide
- NH<sub>3</sub> - ammonia
- (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) Based on operation for a maximum of 1200 hours per year.
- (7) VOC emissions represent residual isopentane, hexene and hexane emissions from the process and have the potential to emit simultaneously from EPNs 33, 34, 234, 235, 236, 237, and 272. VOC emissions from EPNs 33, 34, and 234 through 237 have the same maximum hourly emissions as Emission Point 272. The annual emission rate of 0.07 tpy of total VOC (represented at EPN 33) represents the combined emissions from all of these sources.
- (8) EPNs 234, 235, 236 and 237 are not allowed to emit simultaneously. The transfer systems shall feed only one silo at a time. The annual emission rate of 0.02 tpy PM listed under EPN 234 represents the combined PM emissions from all four filters.
- (9) EPNs 95 through 102 each emit the listed emission rates.

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