# EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

#### Flexible Permit Number 18105

This table lists the emission caps and individual emission limitations 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. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

#### AIR CONTAMINANTS DATA

|   | Air  | Contaminant       | Emission Rates *        |                         |
|---|--|-------------------|-------------------------|-------------------------|
|   |  | Name (3)          | lb/hr                   | TPY**                   |
| VOC SOURCES   |  |                   |                         |                         |
| Fugitives (4), Flares, Analyzers, Finishing, Product Processing | Tanks,<br>2003 through 2004<br>2005 through 2007<br>2008 (Final) | VOC<br>VOC<br>VOC | 152.1<br>146.9<br>143.8 | 202.4<br>178.4<br>164.5 |
| Intermittent Flares   |  | VOC               | 958                     | 0.2 (5)                 |
| MSS   |  | VOC               | 311                     | 2.6                     |
| Plantwide Applicability Limit                                   | 2003 through 2004<br>2005 through 2007<br>2008 (Final)           | VOC<br>VOC<br>VOC |                         | 205.2<br>181.2<br>167.3 |
| NO <sub>x</sub> SOURCES   |  |                   |                         |                         |
| Flares  |  | $NO_x$            | 27.8                    | 13.4                    |
| Intermittent Flares   |  | $NO_x$            | 168.0                   | 0.4                     |
| Plantwide Applicability Limit                                   |  | $NO_x$            |                         | 13.8                    |
| CO SOURCES  |  |                   |                         |                         |
| Flares, Fugitives (4)   |  | СО                | 111.1                   | 115.1                   |
| Intermittent Flares   |  | СО                | 335.4                   | 2.6                     |
| Plantwide Applicability Limit                                   |  | СО                |                         | 117.7                   |

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#### AIR CONTAMINANTS DATA

|                                | Air Contaminant | Emission Rates * |       |
|--------------------------------|-----------------|------------------|-------|
|                                | Name (3)        | <u>lb/hr</u>     | TPY** |
| SO <sub>2</sub> SOURCES        |                 |                  |       |
| Flares and Intermittent Flares | SO <sub>2</sub> | 0.1              | 0.2   |
| Plantwide Applicability Limit  | SO <sub>2</sub> |                  | 0.2   |
| PM SOURCES                     |                 |                  |       |
| Finishing, Product Processing  | PM              | 9.9              | 35.5  |
| Plantwide Applicability Limit  | РМ              |                  | 35.5  |
| ACETONE SOURCES                |                 |                  |       |
| Product Processing             | Acetone         | 9.23             | 6.98  |

- (1) Emission point identification either specific equipment designation or emission point number from a plot plan.
- (2) A specific point source name. For fugitive sources, use an area name or fugitive source name.
- (3) VOC volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 (includes speciated compound emission caps).
  - PM particulate matter, suspended in the atmosphere, including PM<sub>10</sub>.
  - PM<sub>10</sub> particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no particulate matter greater than 10 microns is emitted.
  - SO<sub>2</sub> sulfur dioxide
  - NO<sub>x</sub> nitrogen oxides
  - CO carbon monoxide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.
- (5) The annual emissions rate only includes the propylene unloading flare. Annual MSS emissions from the synthesis area flares as included in the line above.
- \* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

  \_\_\_\_\_\_ Hrs/day \_\_\_\_\_\_ Days/week \_\_\_\_\_\_ Weeks/year or \_\_\_\_8,760\_\_\_\_

Hrs/year

<sup>\*\*</sup> Compliance with the emission caps shall be based on a 12-month rolling

average of emissions with the exception of the 2003 through 2007 VOC emission caps which are based on a calender year.

### EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS

#### **EMISSION POINT CATEGORIES**

| <u>Category</u>     | <u>EPN</u>          | <b>Description</b>   |  |
|---------------------|---------------------|--|--|
| Flares              | 238FL301            | PP-2 Line 1 Flare<br>238FL301A   | PP-2 Line 2 Flare  |
| Intermittent Flares | 238FL301            | PP-2 Line 1 Flare<br>238FL301A<br>238FL330<br>238FL330A<br>RCUMMSF     | PP-2 Line 2 Flare<br>PP-2 Line 1 High<br>Pressure Flare<br>PP-2 Line 2 High<br>Pressure Flare<br>Propylene<br>Unloading Rack Flare   |
| Fugitives           | F029FG Feed Purific | cation Area Fugitives F072PR1 F072FG2A F029MR1 RCUF Propylene Unloadir | Line 1 Synthesis<br>Fugitives<br>Line 2 Fugitives<br>Line 1 Material<br>Recovery Area Fugitives<br>ng Rack Fugitives   |
| Analyzers           | 029AV3 Feed Purific | oation Analyzer Vents<br>072AV1<br>072AV2<br>029AV4<br>029AV5<br>139AV | Line 1 Synthesis Area Analyzer Vents Line 2 Synthesis Area Analyzer Vents Line 1 Material Recovery Analyzer Vents Line 2 Material Recovery Analyzer Vents Propylene Unloading Analyzer Vents |
| Tanks               | 072T150             | Catalyst Tank 148T153 148T157 072T158 072T159 148T151 072C110          | Peeb Tank Peeb Tank Peeb Tank Peeb Tank Peeb Tank Teal System Tank Compressor Oil Reservoir  |

| 072C120    | Compressor Oil    |
|------------|-------------------|
|            | Reservoir         |
| 072T150A   | Catalyst Tank     |
| 148T153A   | Peeb Tank         |
| 148T155A-D | Teal System Waste |
|            | Tanks             |
| 148T157A   | Peeb Tank         |
| 072C110A   | Compressor Oil    |
|            | Reservoir ·       |
| 072T133    | Peroxide Tank     |
| 072T139    | Peroxide Tank     |
| 072T133A   | Peroxide Tank     |
| 072T139A   | Peroxide Tank     |
| 064T104G   | Peroxide Tank     |
| 064T137    | Peroxide Tank     |

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#### **EMISSION POINT CATEGORIES**

| Category           | <u>EPN</u>  | <u>Description</u> |       |                    |                       |
|--------------------|---|--------------------|-------|--------------------|-----------------------|
| Finishing          | 072F251 Synthesis Area Baghouse (Line 1 Recycle Feed Bin/Pellet Receiver, Pellet Surge Hopper, Alutriators, Bag Dump Station, Drum Dump Station, Extruder Feed/Mixer Hopper, Pellet and Powder Loading; Line 2 Recycle Feed Bin/Pellet Receiver, Pellet Surge Hopper, Alutiators, Bag Dump Station, Drum Dump Station, Extruder Feed/Mixer Hopper, Pellet and Powder Loading; other support facilities) |                    |       |                    |                       |
|                    |   |                    | 072D  |                    | ´ Line 1 Pellet Dryer |
|                    |   |                    |       |                    | with Exhaust Blower   |
|                    |   | (                  | 072M  | S1                 | Line 1                |
|                    |   |                    |       |                    | Miscellaneous         |
|                    |   |                    |       |                    | Insignificant Sources |
|                    |   | (                  | 072D: | 141A               | Line 2 Pellet Dryer   |
|                    |   |                    |       |                    | with Exhaust Blower   |
|                    |   | (                  | 072M  | S2A                | Line 2                |
|                    |   |                    |       |                    | Miscellaneous         |
|                    |   |                    |       |                    | Insignificant Sources |
|                    |   | (                  | 072E) | X141               | Line 1 Extruder       |
|                    |   | (                  | 072E  | X141A              | Line 2 Extruder       |
| Product Processing | a 063D391   | L Pellet Storage   | e Bin |                    |                       |
| `                  | •   | 63D392             |       | Pellet Storage Bin |                       |
|                    | 06  | 63D393             |       | Pellet Storage Bin |                       |
|                    | 06  | 64D209             |       | New Make Pellet Bi | n                     |

New Make Pellet Bin

New Make Pellet Bin

064D209 064D210

064D211

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| 064F126 | Processing Area Baghouse (Pellet Transition              |
|---------|--|
|         | Bin, New Make Pellet Bin, Pellet/Powder Feed Bins,       |
|         | Pellet Metering Bins, Feeders, other support facilities) |
| 064D301 | Pellet Storage Bin                                       |
| 064D302 | Pellet Storage Bin                                       |
| 064D303 | Pellet Storage Bin                                       |
| 064D304 | Pellet Storage Bin                                       |
| 064D305 | Pellet Storage Bin                                       |
| 064D306 | Pellet Storage Bin                                       |
| 064D307 | Pellet Storage Bin                                       |
| 064D308 | Pellet Storage Bin                                       |
| 064D309 | Pellet Storage Bin                                       |
| 064D310 | Pellet Storage Bin                                       |
| 064D311 | Pellet Transition Bin                                    |
|         |  |

# EMISSION SOURCES - EMISSION CAPS AND INDIVIDUAL EMISSION LIMITATIONS **EMISSION POINT CATEGORIES**

| <u>Category</u> | <u>EPN</u>  | <b>Description</b> |  |
|-----------------|-------------|--------------------|--|
| Product Prod    | essing (cor |                    | Pellet Transition Bin Pellet Metering Bin Pellet Metering Bin Pellet Metering Bin Pellet Packaging Bin Pellet Storage Bin |
|                 |             | 064D381            | Pellet Storage Bin<br>Pellet Storage Bin   |

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| 064D382  | Pellet Storage Bin |
|----------|--------------------|
| 064D384  | Pellet Storage Bin |
| 064D385  | Pellet Storage Bin |
| 064D386  | Pellet Storage Bin |
| 064G104D | Feeder             |
|          |                    |

 064S104D
 Feeder

 064EX104
 Extruder 104

 064EX105
 Extruder 105

 064S104A
 Pellet Dryer

 064S105A
 Pellet Dryer

 F064BS1
 Bagging System

F064BS1 Bagging System
064LR1 North Bulk Car Loading
064LR2 South Bulk Car Loading
064LT1 North Bulk Truck Loading

MSS

Uncontrolled Maintenance, Startup, and Shutdown Emissions allowed under Special Condition No. 3.

Dated <u>July 14, 2005</u>